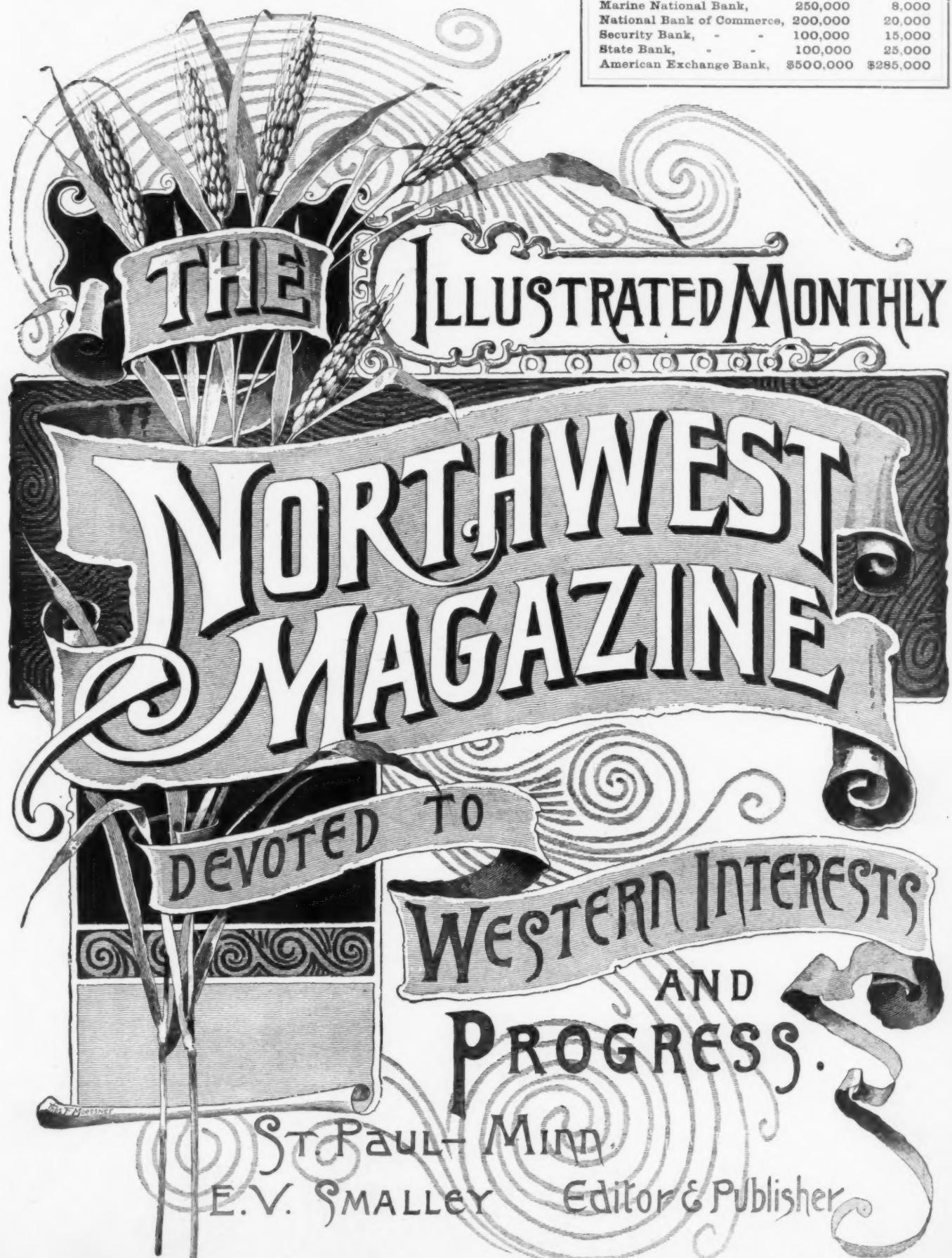


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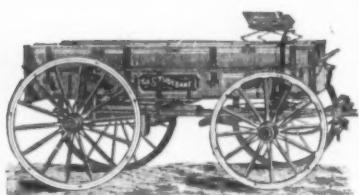
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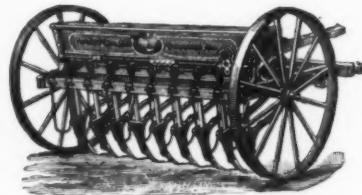


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IN THE SILENT WOODS.

BY LOUISE HERRICK WALL.



leaves of the salal, grown into a tough, harsh tangle, and above them the tender green of the salmon berry bushes, heavy now with soft orange and red berries, form in their wild luxuriance, a solid, unyielding thicket. There is no sound nor sign of life, human or animal; no path, no stream, no track—a great silent untouched waste—a wilderness of forest on the western coast of Washington.

An immense fir, fallen in its prime, crushes the undergrowth out, and lies with upturned roots, death creeping slowly along its gigantic length. The shallow sprawling roots clutch impotently a handful of the earth on which in life they took so slight a hold; and from this mold an elk fern tosses high in air great jets of green that slip to earth again, through the grotesque entwinement of the roots, a dark cascade with overlapping leaves as smooth and glossy as the down dropping plumage of a bird.

The breathless quiet is at last broken, a snap-

ping of twigs, at first faint and now distinct, comes from the far side of the fallen tree; the salmon berry thicket stirs; something black and formless, like a furry hand, appears above the prostrate trunk, slips back again with a clawing sound as it scratches harshly down the rough bark, then is lifted once more and set firmly on top above it a black face rises, followed deliberately by the round, shaggy shoulders of a bear. He drags himself up with slow, sullen caution, turning his long head and small, calculating eyes from side to side as he looks about. His mouth is twisted up at one corner with an ill-natured half snarl, and his lips are stained and dripping with the red juice of the salmon berry. After looking about him, he begins to follow the trunk of the fir. As he moves, bald, whitish spots show beneath his shoulders, where in scratching himself, his claws have worn off the black hair. His claws strike now on the bark of the tree with the force of iron grappling hooks. He is walking from the root end of the fir up toward the branches, a straight, broad road of more than one hundred feet. Reaching the branches, he still pushes ahead, following the trunk; but the way is heavily barred; and looking once more cautiously to the right and left he drops his fore paws to the ground, then follows the heavy hind-quarters, and he is out of sight. The bushes crash under his weight, their movement shows his path. Then silence again, dense, impenetrable silence. There is no bird nor insect life. The moist gray moss hangs from the trees unstirred by a breath. No flicker of the July sun reaches the earth. In the vast evergreen monotony time and season have no significance.

* * * * *

Many days later the silence was again broken. A man's face appeared above the fallen fir. With a great effort he climbed to the trunk, and stood looking about him. His face was terribly white and emaciated; his rough clothes torn, and his eyes wildly wide and staring. He held a branch of salmon berry in his hand; and, seating himself on the tree, began pulling off the orange berries which hung like little glass lanterns from the green branch, counting the berries aloud as he ate them. When he had finished these, he began groping in his pockets; he did it utterly hopelessly, as if for the thousandth time. The upper part of the man was covered by a heavy mackinaw coat below which the wreck of a pair of trousers dropped their tatters into high leather boots. He had neither hat nor gun. After turning every pocket, he drew off one boot, shook it out, then the other. His socks were almost entirely gone. As he searched,

he talked to himself childishly: "Where did I lose it? When did I lose it? It must have dropped out of my pocket when I was climbing—that other day." He sat still when he had put on his boots, and stared hopelessly before him; then, as if seized with a sudden panic, he sprang from the tree and plunged into the thicket, and beat his way wildly along. He stumbled and fell; but rising and looking behind with a wild face, plunged on. He fell again, and lying where he had fallen, screamed "Help! Help! Help!" There was not even an echo. The silence that he had torn closed around him as completely as before. He lay and moaned and sobbed, and then sitting up, screamed again and again. Struggling to his feet once more, he plunged on, falling more and more often as his failing strength slipped away from him. There was a faint, faint rustle at his feet, kneeling with sudden wild eagerness, he tore aside a bush, and with swiftness and cunning born of his terrible hunger, trapped a toad in his hands, and scarcely looking at it, devoured it furiously. It was loathsome, but he was dying of hunger and despair. After this he lay still a long while, and a clearer intelligence grew in his face. He could just remember that at some time in the dim past he had left his little cabin, built by the river bank on a section of government land, to follow a band of elk. He had but a few days experience of these woods where eastern wood lore is of so little avail; with a gun and pocket compass, he had told himself no man could get lost. In the excitement of the chase, following along the elk trail close upon the heels of the elk, he had left the river bottom and gotten into higher country. Over hills and hog backs they led him, across brawling mountain streams still muddled by their fleeting feet and beyond where the graceful hoofs cut their tracks on the moistened ground. The trail itself lay a smooth-beaten track through the forest, springing across the fallen tree trunks and straight onward: so smooth the way lay before him that he had not realized into what a dense wilderness they were leading him. Once he had caught the distant flash of the antlers of the last elk, but in too fleeting a way for him to get a shot. Night came on, and the chase had to be given over. It was then that he discovered the loss of his compass. Each day after that became less distinct in his memory; hunger, and fear, and weakness, and the recollection of falling, falling terrible distances, like a man in a nightmare, formed the rest of his dazed recollection. He lay now making a final effort to concentrate his faculties. Gathering himself together, he got to his feet, struggling manfully to be calm and to clear his

hazy mind. He looked about him. The land lay unevenly; above spread the black dome of the evergreens, under foot the tangle of the under brush. He lifted his empty hands and let them drop despairingly, and then tried to retrace his steps. The way was marked faintly here and there where he had fallen and crushed the smaller bushes. As he walked, the old frightened panic seized him again, and he began to run and stumble. He went on and on. He was afraid to pause or stop. He felt that this was his last strength, his last effort. As he went on, a dense blackness gathered about his eyes; and still running, he struck heavily against a tree and fell, the last ray of sense knocked out of him.

It was mid-July; but in these sunless forests it is never warm, and at night it is cold and penetratingly damp. Scott lay through the night with the moisture gathering upon his hair and beard; it stood out in round drops upon his mackinaw, but he was resting.

II.

Through the heavy stillness that enshrouded him a sound struggled, a voice singing broken by pauses. Scott turned his head and opened his eyes as one who wakes still clinging lovingly to sleep. A few feet from him the land dropped into a green canyon, at whose foot a stream called out in noisy hiding; across the ferny chasm a fallen tree lent itself as a crossing to a blithe procession of moss-rooted ferns and baby trees. But as Scott opened his eyes, the bridge was serving a sturdier passenger. Across the log, picking her way, a woman came toward him. She walked the log fearlessly, the spikes in her shoes giving her a firm footing. On her back rested a pack, and over her shoulder a light rifle. She carried her burden soldier-wise or rather settler-wise, a pair of logger's overalls holding a flour bag of provisions securely in place. At the waist band the overalls were tied in tightly with a cord that also held together the mouth of the sack; the legs of the overalls were then brought over her shoulders to the front, then under the arm pits, and at the back the bottom of each leg was firmly tied to a corner of the flour bag. The flannel blouse parted a little at the throat, and her short skirt barely touched the tops of weather-stained, tan-colored leggings that reached to the knee; they were buttoned closely to the leg and followed the lines of her fine, sturdy figure with graceful exactitude. She came forward singing, her shoulders braced well back, her steps taken gaily in the abandon of her short skirt, looking like a fresh-faced Amazon on a morning's walk through the wilderness.

Scott dragged himself forward across her path, then closed his eyes dizzily. The Amazon started and shied back from him. Then, standing her rifle against a tree, she leaned down and looked closely into his face.

"You want something to eat," she said.

He opened his eyes then and gazed at her eagerly; She gave a dexterous hitch, like a vast shrug, which threw the pack upward and relieved the strain upon the legs of the overalls, and then contrived to slip her arm out of the sling of her pack and let it drop to the ground. Unloosing the mouth of the bag she drew out a piece of "jerked" elk meat, and kneeling down beside him, she gave him the meat with one hand while with the other she slipped her pack

under his head. She watched him eat with a motherly sort of compassion, and then, after he had taken a few mouthfuls, reaching out her hand, she quietly took it from him.

"You have had enough, now," she said with an intonation that recalled his babyhood. "Are you strong enough to walk," she asked next.

He lifted himself on his elbow, turned whiter and fell back. She got up, and automatically reaching out her hand for her rifle, stood leaning on it, looking down at him with lip and forehead tightened in a concentration of common sense.

"I don't want to carry you," she said thoughtfully, measuring him with her eye. "It is half a mile over the elk trail to where my canoe lies, and after you have rested, you will have to try and walk."

Scott did not reply, but lay languidly watching her. Laying aside her rifle she went once more to her pack and took from it a ball of heather mixture yarn pierced through with a bunch of steel knitting needles, and a new sock with a white toe tapering trimly down. Sitting near him with her back to the tree, she drew out the needles and began some mysterious functions, over which her lips moved in whispered incanta-

feet became entangled in the undergrowth. Leaning cruelly upon his support, they crept forward laboriously. The woods were growing a little less dense, glimpses of sky showed here and there, and the trees did not reach so unearthly a height before throwing out a limb. The dim monotone was shot by an occasional much filtered ray of sunshine, bringing out the bright greens of the small-leaved undergrowth. For a long while Scott had been turning something over in his mind. He stopped suddenly, and drawing his arm away, said hesitatingly: "I am too heavy. You are only a woman." And then, the bewilderment growing, "What woman are you? I thought you were my mother."

"I am Anne Carter, an Englishwoman," she said slowly and distinctly. "I am going to take you to my cabin up the river. You are not too heavy. I am strong." Replacing his arm, she drew him on. His weight settled heavily upon her again. As they advanced, the sound of the river came to them, growing more distinct with every step. The trees were still darkly solemn around them, when a slight turn in the trail brought them to the river itself. It grew light, as when the ears come out from a half lit tunnel into the sunshine. The river lay beneath them a few feet away, a broad, rushing mountain torrent fed by the ice and snow of the Olympic Range, and racing downward with the impetus of high origin. Far across the river lay the unknown, unexplored mountains, their feet dark in evergreens, their snow heads melting into the early sunset brightness.

They had come out upon the river just above the "Big Jam." This had grown from a single fallow tree, by slow accretion, into an impassable barrier against which the debris of the river was swept and detained. The river threw itself against the dam, and then crept, narrowed and humbled, through the breaches.

As Scott came out from the forest he drew a deep breath and stood upright, feeling an intense relief in the lifting of the dense oppression of the woods. The silence and im-

prisonment were at an end, and weakness and fear, born of his privation, seemed slipping away, becoming as unreal and remote as the far, far tops of the snowy Olympics, losing themselves in the pulsing sun, as a white-winged moth shivers, palpitates, and draws with shuddering rapture into a wavering flame. For a moment the physical elation of coming out into the open, where the gaze could sweep onward, held Anne beside him; then with quick trouble in her face, she turned and said:

"We are too late. There is not an hour more of daylight. My claim is more than five miles up the river."

She left Scott and walked toward the jam thoughtfully. She had gone a few feet, when she looked back to find Scott following. She watched his first efforts to walk alone with alert anxiety; but seeing his strength was coming back to him, she led on around the jam. Below it in a sheltered cove, lay a small "shovel-nose" canoe, a slight narrow craft, shaped by a Chinook Indian from part of the trunk of a cedar, broadened and flattened at the ends so that its contour, when looked at from above, was that of a long handle with a shovel at each end.

"This is where we will have to camp," said Anne, with a gesture toward a level spot under



"THROUGH THE WHITE HAZE ANNE CAME TOWARDS HIM."

THE NORTHWEST MAGAZINE, SEPTEMBER, 1891.

a great hemlock. "And now I am going to get supper."

As Anne took from the canoe an iron pot, steel knife and fork and pewter spoon, Scott's face lit with gentle enthusiasm.

"Can I help," he asked.

"Yes," she said indulgently, "you can make the fire while I hang the pot."

With a hatchet she hacked two forked limbs from a fallen spruce, and as she trimmed them into shape, she showed Scott where to build his fire. Taking a cube of Washington matches, which in squares of one hundred clung together for mutual protection, she carefully tore a few from their mates and handed them to him, saying gravely, as she met his eyes: "Be careful of them. Dry matches are scarce in the woods."

She drove the stakes into the ground firmly, and hung the pot on a horizontal pole resting in the forks of the upright stakes. As she worked, the sun slid behind the mountains, and once more their hard, white outlines reasserted themselves against the fading glow. As Anne steeped the tea and broiled some elk meat in front of the fire, Scott leaned against the hemlock and became absorbed in watching her. In his half dazed condition she seemed as impersonal a creature as the ravens who fed Elijah in the wilderness.

With the twilight a chill crept into the air, and Scott knelt close to the fire with outstretched hands to catch some of the glow from the pitchy wood that was bringing a deeper color to Anne's face, as she turned away from the heat and held the broiling meat on a fork, at arm's length from her, toward the red coals. By the firelight the two ate their meal, sharing the same cup. Scott realized dimly that no country woman of his own could accept the situation with the grave literalness of this young English woman, for no sense of adventure or romance stirred her quiet pulses. The thought was very shadowy to him, for the physical comfort of being taken care of lulled and soothed him into opiate satisfaction. He was half drowsing by the fire when he noticed that Anne was gone. She came toward him soon carrying a great armful of soft, springy moss. The thick moss that lies under the trees in sheets, of such exquisite, vivid green through all the wet season of winter dies down in summer to a brown, rusty mass, and Anne was heaping this under the tree, in an irregular pile. It was quite dark when this mess of brown moss was smoothed into some shape, and the tired man lay down with Anne's pack under his head and her single covering, a heavy settler's blanket, over him. He yielded himself passively to her, and she covered him and tucked him in as if he had been a tired child. When she had made him comfortable she broke up some more sticks for the fire and sitting on the end of the pallet leaned against the rough tree and took out her knitting. Scott lay watching the fire, against which his head was projected darkly, and her lifted hands moved over her knitting with an automatic swiftness infinitely removed from haste. The fire-light caught the steel points of the needles from time to time, and as he watched for that recurrent flash a drowsy confusion passed through him, a delicious feeling of being touched with impalpably delicate hands, and bathed in softest caressing billows of rest, then sinking down, down, down through them, he reached oblivion.

Long after, Scott waked, shivering. The fire had died out entirely; the intense, breathless stillness of the woods in the black night pressed upon him. Far above, the pointed shafts of the fir and spruce towered upward, only leaving tiny patches of blue black sky visible, the blackness of this sky detached from the dark foliage by a few bright pin pricks of stars. The stillness that in the daylight was solemn became awful in the

soundless blackness of night, the damp chill of earliest morning was in the air, clinging like the death cloth over a rigid face. Scott shuddered. Beside him there was a faint, drowsy stir, and a hand drew the loosened blankets firmly over him and tucked it in at the back. Scott put his own hand out from the nest his weight had hollowed in the moss, and softly touched the sleeve of Anne's blouse. Then, drawing it back again, he turned and slept.

When Scott waked again and sat up it was quite light; a fire crackled under the hemlock with fresh zest, and the nest near him in the moss was like a wren's in October, but the crushed and matted moss retained a vague outline. Clouds of silvery vapor were steaming up from the river and formed above it in a luminous veil. Through the white haze, dimmed into a shadowy unreality, Anne came toward him. Over her shoulder she carried a fishing rod and from a string swung several of the beautiful salmon-trout of the Humptulips, the silver of their backs shimmering into the rosy bands on their sides. Her blue flannel blouse, spangled like a morning mullein leaf with water drops, parted from her strong round throat, while the clear rose red of her cheeks was brightened by the cold water that still dampened the even line of her smooth hair.

"Are you better?" she called.

"Yes," said Scott, looking at her, "much better." She was a woman this morning.

When Scott came back to the fire, wetter for a trip to the river, he said with conviction:

"My claim is above this jam."

"In what section and township?" she asked with professional gravity, as she poured out a little tea on the ground to test its strength.

"Section 32, Township 21."

"I thought when I first found you that you were the man that Cruiser Jackson told us about last week. He located you on the claim just above ours on the river." Anne spoke with a faint reminiscent smile and Scott knew that Jackson had ornamented the rehearsal with details that he would never know.

An hour later Anne was steadyng herself in the canoe, as she gave a last keen survey of their camping ground to see that nothing was forgotten.

"Trim the boat," she said as she pushed off, and Scott gathered himself together in the stern. She stood in the bow, one foot advanced, and braced against the upturned shovel end, and balanced a long pole, tipped with an iron spike. She planted the pole in the brown bed of the stream, that seemed so near through the clear water, and throwing her weight against it allowed the boat to run up almost the length of the pole before she recovered and planted the pole again. The stream was running against her, and the boat with its double load made heavy poling. Scott watched the action keenly as she rhythmically pushed and recovered, her shoulders bending with pliant strength and her short, swaying skirt sweeping the tops of her leggings. The knock of the action lay in propelling the boat along a straight course while applying the force continually from one side of the bow. Anne's face was turned half toward him, her lips drawn to a fine bright line and her nostrils tense with the effort.

"For Heaven's sake! Let me do that," Scott said sharply, jumping up.

"I don't think you can," she said.

"I am not altogether tenderfoot," he replied hotly. "There is a small admixture of man."

Anne looked at her charge in his new character, and under her relaxed attention the canoe's head swung about.

"You—see" she said with two strong strokes, "when one person poles it takes constant attention. You can't afford to make one false stroke or you will bring up on a snag."

The river ran narrow and strong, lying on one side in a fine meadowy bottom, bronzing grasses undulating softly to the water edge, while on the other the bank dropped sharply down, the evergreens climbing lustily up the sheer incline and throwing back their green black reflection into the river. Here and there a dainty, fine-leaved, fair-skinned alder stood shivering on the water's edge, like one of Henner's undecided nymphs, ready for the bath but afraid to make the first plunge. The swiftness of the current cleared a narrow path for navigation, but on both sides villainous snags, torn roots and jagged timber threatened the canoe.

"Is that the only pole?"

Anne did not take her eyes from her work in saying that it was.

"Then we must stop and make another."

The canoe was brought in to shore and secured, while they shaped a second pole, burning one end to harden the point as the Indians do, instead of the iron spike of the white man.

"You would better give me the new one," Anne said as they took their places in the boat. "You will have trouble enough getting the motion."

Scott took the spiked pole from her, feeling blackly ungrateful. She placed him in the stern and returned to the bow.

It is very pleasant to a woman to learn a physical accomplishment from a man, but there is only one man in a thousand magnanimous enough to enjoy being instructed by a woman, and Scott was not that thousandth man.

As he gradually learned to take her stroke, feeling every failure with absurd chagrin, he forgot everything in the concentration of the physical effort. After they had made a mile or two, Anne now and then giving some direction or word of qualified approval, he was brought from water to earth by the narrowing of the stream as it flowed between perpendicular walls of rock. From the sides of the dripping stone hung feather plumes of maiden-hair fern, as ethereal as its hot-house descendant that mists with green the white of a bride's roses, and yet with something of wild hardihood and joy of life, exquisitely frail and exquisitely healthy, from the perfect environment of cool and sunless dampness. Each tiny leaf balanced lightly upon its slender stem of burnished black, and all together they formed themselves on tiptoe about the black horseshoe of the main stem as the figures in a joyous ephemeral ballet that another rush of music will melt into yet another shape. As Scott reached out his hand, the very touch was a soft pleasure as his fingers trailed through the fern. While still in this narrow channel, a rushing sound reached them, a sound more crisp and vehement than that of the river; a length or two of the poles brought them to the very foot of a water fall that sprayed them with its icy mist and beat the river into a cold lather by the force of its impact. It came rushing in a white course down the steep mountain side, springing from rock to rock to meet the river, and then when near its goal making one last glad leap of forty straight feet.

Anne and Scott smiled into each others eyes, as people do out of doors where adjectives are so much too tedious.

"I will never forget when I saw that first," Anne said, as they poled out of the spray. "It was nearly six months ago, my father and I were being brought up to our claim in a canoe. We had just come from California to take up our timber claim and we knew nothing about the woods. Father was ill and disheartened. He had lost everything in the town site boom at Los Angeles. We were there when everybody was crazy, people stood in line all night at the real estate offices to buy lots. In the day-time the

hazy mind. He looked about him. The land lay unevenly; above spread the black dome of the evergreens, under foot the tangle of the under brush. He lifted his empty hands and let them drop despairingly, and then tried to retrace his steps. The way was marked faintly here and there where he had fallen and crushed the smaller bushes. As he walked, the old frightened panic seized him again, and he began to run and stumble. He went on and on. He was afraid to pause or stop. He felt that this was his last strength, his last effort. As he went on, a dense blackness gathered about his eyes; and still running, he struck heavily against a tree and fell, the last ray of sense knocked out of him.

It was mid-July; but in these sunless forests it is never warm, and at night it is cold and penetratingly damp. Scott lay through the night with the moisture gathering upon his hair and beard; it stood out in round drops upon his mackinaw, but he was resting.

II.

Through the heavy stillness that enshrouded him a sound struggled, a voice singing broken by pauses. Scott turned his head and opened his eyes as one who wakes still clinging lovingly to sleep. A few feet from him the land dropped into a green canyon, at whose foot a stream called out in noisy hiding; across the ferny chasm a fallen tree lent itself as a crossing to a blithe procession of moss-rooted ferns and baby trees. But as Scott opened his eyes, the bridge was serving a sturdier passenger. Across the log, picking her way, a woman came toward him. She walked the log fearlessly, the spikes in her shoes giving her a firm footing. On her back rested a pack, and over her shoulder a light rifle. She carried her burden soldier-wise or rather settler-wise, a pair of logger's overalls holding a flour bag of provisions securely in place. At the waist band the overalls were tied in tightly with a cord that also held together the mouth of the sack; the legs of the overalls were then brought over her shoulders to the front, then under the arm pits, and at the back the bottom of each leg was firmly tied to a corner of the flour bag. The flannel blouse parted a little at the throat, and her short skirt barely touched the tops of weather-stained, tan-colored leggings that reached to the knee; they were buttoned closely to the leg and followed the lines of her fine, sturdy figure with graceful exactitude. She came forward singing, her shoulders braced well back, her steps taken gaily in the abandon of her short skirt, looking like a fresh-faced Amazon on a morning's walk through the wilderness.

Scott dragged himself forward across her path, then closed his eyes dizzily. The Amazon started and shied back from him. Then, standing her rifle against a tree, she leaned down and looked closely into his face.

"You want something to eat," she said.

He opened his eyes then and gazed at her eagerly; She gave a dexterous hitch, like a vast shrug, which threw the pack upward and relieved the strain upon the legs of the overalls, and then contrived to slip her arm out of the sling of her pack and let it drop to the ground. Unloosing the mouth of the bag she drew out a piece of "jerked" elk meat, and kneeling down beside him, she gave him the meat with one hand while with the other she slipped her pack

under his head. She watched him eat with a motherly sort of compassion, and then, after he had taken a few mouthfuls, reaching out her hand, she quietly took it from him.

"You have had enough, now," she said with an intonation that recalled his babyhood. "Are you strong enough to walk," she asked next.

He lifted himself on his elbow, turned whiter and fell back. She got up, and automatically reaching out her hand for her rifle, stood leaning on it, looking down at him with lip and forehead tightened in a concentration of common sense.

"I don't want to carry you," she said thoughtfully, measuring him with her eye. "It is half a mile over the elk trail to where my canoe lies, and after you have rested, you will have to try and walk."

Scott did not reply, but lay languidly watching her. Laying aside her rifle she went once more to her pack and took from it a ball of heather mixture yarn pierced through with a bunch of steel knitting needles, and a new sock with a white toe tapering trimly down. Sitting near him with her back to the tree, she drew out the needles and began some mysterious functions, over which her lips moved in whispered incanta-

feet became entangled in the undergrowth. Leaning cruelly upon his support, they crept forward laboriously. The woods were growing a little less dense, glimpses of sky showed here and there, and the trees did not reach so unearthly a height before throwing out a limb. The dim monotone was shot by an occasional much filtered ray of sunshine, bringing out the bright greens of the small-leaved undergrowth. For a long while Scott had been turning something over in his mind. He stopped suddenly, and drawing his arm away, said hesitatingly: "I am too heavy. You are only a woman." And then, the bewilderment growing, "What woman are you? I thought you were my mother."

"I am Anne Carter, an Englishwoman," she said slowly and distinctly. "I am going to take you to my cabin up the river. You are not too heavy. I am strong." Replacing his arm, she drew him on. His weight settled heavily upon her again. As they advanced, the sound of the river came to them, growing more distinct with every step. The trees were still darkly solemn around them, when a slight turn in the trail brought them to the river itself. It grew light, as when the cars come out from a half lit tunnel into the sunshine. The river lay beneath them

a few feet away, a broad, rushing mountain torrent fed by the ice and snow of the Olympic Range, and racing downward with the impetus of high origin. Far across the river lay the unknown, unexplored mountains, their feet dark in evergreens, their snow heads melting into the early sunset brightness.

They had come out upon the river just above the "Big Jam." This had grown from a single fallow tree, by slow accretion, into an impassable barrier against which the debris of the river was swept and detained. The river threw itself against the dam, and then crept, narrowed and humbled, through the breaches.

As Scott came out from the forest he drew a deep breath and stood upright, feeling an intense relief in the lifting of the dense oppression of the woods. The silence and im-

prisonment were at an end, and weakness and fear, born of his privation, seemed slipping away, becoming as unreal and remote as the far, far tops of the snowy Olympics, losing themselves in the pulsing sun, as a white-winged moth shivers, palpitates, and draws with shuddering rapture into a wavering flame. For a moment the physical elation of coming out into the open, where the gaze could sweep onward, held Anne beside him; then with quick trouble in her face, she turned and said:

"We are too late. There is not an hour more of daylight. My claim is more than five miles up the river."

She left Scott and walked toward the jam thoughtfully. She had gone a few feet, when she looked back to find Scott following. She watched his first efforts to walk alone with alert anxiety; but seeing his strength was coming back to him, she led on around the jam. Below it in a sheltered cove, lay a small "shovel-nose" canoe, a slight narrow craft, shaped by a Chinook Indian from part of the trunk of a cedar, broadened and flattened at the ends so that its contour, when looked at from above, was that of a long handle with a shovel at each end.

"This is where we will have to camp," said Anne, with a gesture toward a level spot under



"THROUGH THE WHITE HAZE ANNE CAME TOWARDS HIM."

tions. From time to time she looked him over, and once drew the pack into better shape under his head. When she looked at him, it was with eyes so quiet and unenthusiastic that they, in his weakness, stilled him. After a very long silence, by which one was too weak and the other too strong to be troubled, she rolled up her work, thrust her needles into the ball, and said:

"We ought to start now when you have some more meat. We have only a few more hours of daylight, and I will need it all to get you to our cabin before night." Helping him to raise his head, she took the pack, and throwing it upon her shoulder, thrust her arms into harness once more. As Scott sat up, the old bewildered look returned to his face.

"You will have to get up and come with me. I will help you," she said soothingly, as she passed her arm under his, and, bracing herself against the tree, helped him to his feet. She took his arm and passed it over her shoulder, and holding firmly to the wrist, drew it down against her breast, so as to support most of his weight. As they walked, some of Scott's strength came back to him; but the journey was terribly difficult on the narrow elk trail, crossed by fallen trees, and everywhere too narrow for two to walk abreast. Whenever Scott lost the track, his weak, inert

a great hemlock. "And now I am going to get supper."

As Anne took from the canoe an iron pot, steel knife and fork and pewter spoon, Scott's face lit with gentle enthusiasm.

"Can I help," he asked.

"Yes," she said indulgently, "you can make the fire while I hang the pot."

With a hatchet she hacked two forked limbs from a fallen spruce, and as she trimmed them into shape, she showed Scott where to build his fire. Taking a cube of Washington matches, which in squares of one hundred clung together for mutual protection, she carefully tore a few from their mates and handed them to him, saying gravely, as she met his eyes: "Be careful of them. Dry matches are scarce in the woods."

She drove the stakes into the ground firmly, and hung the pot on a horizontal pole resting in the forks of the upright stakes. As she worked, the sun slid behind the mountains, and once more their hard, white outlines reasserted themselves against the fading glow. As Anne steeped the tea and broiled some elk meat in front of the fire, Scott leaned against the hemlock and became absorbed in watching her. In his half dazed condition she seemed as impersonal a creature as the ravens who fed Elijah in the wilderness.

With the twilight a chill crept into the air, and Scott knelt close to the fire with outstretched hands to catch some of the glow from the pitchy wood that was bringing a deeper color to Anne's face, as she turned away from the heat and held the broiling meat on a fork, at arm's length from her, toward the red coals. By the firelight the two ate their meal, sharing the same cup. Scott realized dimly that no country woman of his own could accept the situation with the grave literalness of this young English woman, for no sense of adventure or romance stirred her quiet pulses. The thought was very shadowy to him, for the physical comfort of being taken care of lulled and soothed him into opiate satisfaction. He was half drowsing by the fire when he noticed that Anne was gone. She came toward him soon carrying a great armful of soft, springy moss. The thick moss that lies under the trees in sheets, of such exquisite, vivid green through all the wet season of winter dies down in summer to a brown, rusty mass, and Anne was heaping this under the tree, in an irregular pile. It was quite dark when this mess of brown moss was smoothed into some shape, and the tired man lay down with Anne's pack under his head and her single covering, a heavy settler's blanket, over him. He yielded himself passively to her, and she covered him and tucked him in as if he had been a tired child. When she had made him comfortable she broke up some more sticks for the fire and sitting on the end of the pallet leaned against the rough tree and took out her knitting. Scott lay watching the fire, against which his head was projected darkly, and her lifted hands moved over her knitting with an automatic swiftness infinitely removed from haste. The fire-light caught the steel points of the needles from time to time, and as he watched for that recurrent flash a drowsy confusion passed through him, a delicious feeling of being touched with impalpably delicate hands, and bathed in softest caressing billows of rest, then sinking down, down, down through them, he reached oblivion.

Long after, Scott waked, shivering. The fire had died out entirely; the intense, breathless stillness of the woods in the black night pressed upon him. Far above, the pointed shafts of the fir and spruce towered upward, only leaving tiny patches of blue black sky visible, the blackness of this sky detached from the dark foliage by a few bright pin pricks of stars. The stillness that in the daylight was solemn became awful in the

soundless blackness of night, the damp chill of earliest morning was in the air, clinging like the death cloth over a rigid face. Scott shuddered. Beside him there was a faint, drowsy stir, and a hand drew the loosened blankets firmly over him and tucked it in at the back. Scott put his own hand out from the nest his weight had hollowed in the moss, and softly touched the sleeve of Anne's blouse. Then, drawing it back again, he turned and slept.

When Scott waked again and sat up it was quite light; a fire crackled under the hemlock with fresh zest, and the nest near him in the moss was like a wren's in October, but the crushed and matted moss retained a vague outline. Clouds of silvery vapor were steaming up from the river and formed above it a luminous veil. Through the white haze, dimmed into a shadowy unreality, Anne came toward him. Over her shoulder she carried a fishing rod and from a string swung several of the beautiful salmon-trout of the Humptulips, the silver of their backs shimmering into the rosy bands on their sides. Her blue flannel blouse, spangled like a morning mullen leaf with water drops, parted from her strong round throat, while the clear rose red of her cheeks was brightened by the cold water that still dampened the even line of her smooth hair.

"Are you better?" she called.

"Yes," said Scott, looking at her, "much better." She was a woman this morning.

When Scott came back to the fire, wetter for a trip to the river, he said with conviction:

"My claim is above this jam."

"In what section and township?" she asked with professional gravity, as she poured out a little tea on the ground to test its strength.

"Section 32, Township 21."

"I thought when I first found you that you were the man that Cruiser Jackson told us about last week. He located you on the claim just above ours on the river." Anne spoke with a faint reminiscent smile and Scott knew that Jackson had ornamented the rehearsal with details that he would never know.

An hour later Anne was steadyng herself in the canoe, as she gave a last keen survey of their camping ground to see that nothing was forgotten.

"Trim the boat," she said as she pushed off, and Scott gathered himself together in the stern. She stood in the bow, one foot advanced, and braced against the upturned shovel end, and balanced a long pole, tipped with an iron spike. She planted the pole in the brown bed of the stream, that seemed so near through the clear water, and throwing her weight against it allowed the boat to run up almost the length of the pole before she recovered and planted the pole again. The stream was running against her, and the boat with its double load made heavy poling. Scott watched the action keenly as she rhythmically pushed and recovered, her shoulders bending with pliant strength and her short, swaying skirt sweeping the tops of her leggings. The knack of the action lay in propelling the boat along a straight course while applying the force continually from one side of the bow. Anne's face was turned half toward him, her lips drawn to a fine bright line and her nostrils tense with the effort.

"For Heaven's sake! Let me do that," Scott said sharply, jumping up.

"I don't think you can," she said.

"I am not altogether tenderfoot," he replied hotly. "There is a small admixture of man."

Anne looked at her charge in his new character, and under her relaxed attention the canoe's head swung about.

"You—see" she said with two strong strokes, "when one person poles it takes constant attention. You can't afford to make one false stroke or you will bring up on a snag."

The river ran narrow and strong, the land lying on one side in a fine meadowy bottom with bronzing grasses undulating softly to the water's edge, while on the other the bank dropped sharply down, the evergreens climbing lustily up the sheer incline and throwing back their green black reflection into the river. Here and there a dainty, fine-leaved, fair-skinned alder stood shivering on the water's edge, like one of Hennier's undecided nymphs, ready for the bath but afraid to make the first plunge. The swiftness of the current cleared a narrow path for navigation, but on both sides villainous snags, torn roots and jagged timber threatened the canoe.

"Is that the only pole?"

Anne did not take her eyes from her work in saying that it was.

"Then we must stop and make another."

The canoe was brought in to shore and secured, while they shaped a second pole, burning one end to harden the point as the Indians do, instead of the iron spike of the white man.

"You would better give me the new one," Anne said as they took their places in the boat. "You will have trouble enough getting the motion."

Scott took the spiked pole from her, feeling blackly ungrateful. She placed him in the stern and returned to the bow.

It is very pleasant to a woman to learn a physical accomplishment from a man, but there is only one man in a thousand magnanimous enough to enjoy being instructed by a woman, and Scott was not that thousandth man.

As he gradually learned to take her stroke, feeling every failure with absurd chagrin, he forgot everything in the concentration of the physical effort. After they had made a mile or two, Anne now and then giving some direction or word of qualified approval, he was brought from water to earth by the narrowing of the stream as it flowed between perpendicular walls of rock. From the sides of the dripping stone hung feather plumes of maiden-hair fern, as ethereal as its hot-house descendant that mists with green the white of a bride's roses, and yet with something of wild hardihood and joy of life, exquisitely frail and exquisitely healthy, from the perfect environment of cool and sunless dampness. Each tiny leaf balanced lightly upon its slender stem of burnished black, and all together they formed themselves on tiptoe about the black horseshoe of the main stem as the figures in a joyous ephemeral ballet that another rush of music will melt into yet another shape. As Scott reached out his hand, the very touch was a soft pleasure as his fingers trailed through the fern. While still in this narrow channel, a rushing sound reached them, a sound more crisp and vehement than that of the river; a length or two of the poles brought them to the very foot of a water fall that sprayed them with its icy mist and beat the river into a cold lather by the force of its impact. It came rushing in a white course down the steep mountain side, springing from rock to rock to meet the river, and then when near its goal making one last glad leap of forty straight feet.

Anne and Scott smiled into each others eyes, as people do out of doors where adjectives are so much too tedious.

"I will never forget when I saw that first," Anne said, as they poled out of the spray. "It was nearly six months ago, my father and I were being brought up to our claim in a canoe. We had just come from California to take up our timber claim and we knew nothing about the woods. Father was ill and disheartened. He had lost everything in the town site boom at Los Angeles. We were there when everybody was crazy, people stood in line all night at the real estate offices to buy lots. In the day-time the

real estate agents drove large parties of people out miles and miles from town, with a brass band playing, and to the sound of music sold city property in the desert. Father was very ill after the collapse, I persuaded him to come up here and take up a timber claim from the government. Do you know California?"

Scott shook his head.

"California is very different from this. It is very gay and beautiful." Anne paused, then added, "When we came that day to this little waterfall it seemed merry. Everything else was sombre. Since then I have passed it every week going for provisions. Father has never gotten strong."

She spoke of his sickness in that tone of humdrum quiet that jars American ears almost as much as our sentimental manner, in like case, jars English taste.

"Won't your father be anxious about you now?" Scott asked. "He will know that I had something important to do, and he will be satisfied." As she spoke in her quiet assurance, an intense irritation against her and her independence awakened in Scott. In all their intercourse she had reversed every natural relation of man and woman.

"Most women would be afraid to travel alone in such a country," he said with disagreeable animus.

"Yes, many women are timid."

The trees flashed by quickly for a few minutes, and then Scott's irritation spoke again.

"I suppose I ought to feel very grateful to you for picking me up and bringing me along as you have done; but it seems to give you such an advantage over me that I do not feel especially grateful."

Anne did not follow the drift at all, and replied stiffly:

"There is no occasion for gratitude. I knew you were a neighbor, and besides, I would have done it for any one."

"Yes," he replied, hotly. "You make me understand that perfectly."

Neither of them broke the silence that again fell, measured off into periods by the regular swirl of the water against the poles, until Anne quickened her stroke and said:

"My landing is around the next bend. Will you be able to take the canoe above and get to your claim from the river?"

As she spoke they came to a rough little float of logs lashed together, from which a trail led up the bank.

"I am going with you to your cabin first," he said, gathering up her pack from the boat. Anne hesitated but did not reply, and together they ran the canoe's head high up on the bank. A few steps brought them to the cabin standing in a small piece of cleared ground. Beyond the house the brown terraces of new earth, supporting a feeble garden, climbed the hill, and then, as if despairing, stopped short, confronted by a solid phalanx of forest trees. The cabin itself was built of slabs of cedar split roughly from a section of a log, their unplaned faces curving with the lines of easiest changes. On all sides, except where the garden perished, lay felled trees, cut down to prevent their falling on the cabin. The tangle of evergreen under foot bleeding its resinous sap into the earth, and above the overarching trees took Scott back to an evening when he had stood, knee deep in Christmas greens, with the silent arches of the village church above him, and he was pierced with a pang of sudden home sickness.

Anne hurried on ahead and as her feet sounded on the wobbly walk of shakes, laid down to form a path from the cabin, the door opened wide, and a handsome, middle-aged man came toward her. They greeted each other perfectly quietly. Scott came forward and explained hurriedly that he

had been to blame for Anne's delay, and laying her pack within the cabin door stood for a moment's awkward space trying to think of some way of thanking Anne.

"Your daughter has been of great service to me, and I hope that both you and she will feel free to call upon me to any extent."

It sounded ridiculous after the night and day that had passed, and he turned without waiting for an answer and followed the trail to the river.

A few nights later Scott was sitting in his one-roomed cabin. The fire sulked in his little rusty stove and the air was full of a curious smell like baked custard that proceeded from the oven in which an armful of wood was slowly simmering itself dry. On one side of the room was a bedstead made of boards nailed to the wall at the back and supported by log uprights in front, on it a mass of blankets lay in tumbled confusion. Back of the stove the wall was decorated with a few hanging utensils of tin and agate ironware. Below the frying pan a long stream of grease ran down to the floor and congealed there into a small white lake.

Scott sat at the table and by the light of a dim lamp pored over a paper covered receipt book. He was trying to find out why the batter cakes he had made for supper had wrinkled themselves into a raw, shapeless mass, instead of turning over flat and baking on both sides.

"The batter should be about as thick as pound cake batter," he read aloud with impatient emphasis. "And what in the Lord's name do I know about pound cake batter? Pound cake batter," he added meditatively. "Why its about two and a half inches thick."

A sharp knock that brought Scott to his feet and the book to the floor interrupted him.

In the woods the sense of hearing becomes so acute from the dense quiet that the steadiest nerves wince beneath such a sound at night fall. With the quick opening of the door the lamp flared and went out, but Scott had no difficulty recognizing Anne's voice as she said in quick, breathless sentences:

"I have come to fetch you. My father is ill. He has fallen on the floor and I cannot lift him."

The girl had lost her self control and stood leaning against the door frame shaking pitifully. Scott plunged into his boots and coat and was ready to go before Anne had gained her breath.

The night was very hazy, the light from a young moon became untangled in the sheets of white mist that hugged the earth, and in torn locks clung to the trees, like gigantic wisps of fleece. Scott led the way along the trail from his cabin to the river and Anne followed close behind.

"For the last day or two he has been worse," she said. "He could scarcely hold his fork at breakfast, and I have noticed that one foot dragged when he walked lately. To-day he has hardly been able to control his movements at all on his left side. But I had no idea of this," she ended with a wailing break in her voice.

Scott felt himself moved by her grief as if it were his own. His strength and courage when he had been so weak had given him an exaggerated conception of her endurance, and to see her so shaken stirred him painfully.

When they reached the river the mist lay in a level lake across the water and filled in the canyon between the banks. In this luminous blind-fold they were delayed in finding the boat, and again in making the opposite landing. Anne was in an agony of impatience. At last the orange light of the cabin shone upon them, and running ahead Anne opened the door and Scott followed through the kitchen into the cabin's inner room. On the floor near the bed, her father lay, with wide, senseless eyes, breathing with terrible difficulty. Together they lifted him and made him more comfortable. Anne

brought a low chair and sat near the bed holding his hand and watching the terrible fixity of his face.

"Shall I go for the doctor?" Scott had asked, but she had shaken her head.

"I will go as soon as it is light," he added.

It was a long, solemn night. Like the inexperienced nurses they were they both sat up all night, gazing at the figure that only moved with each laboriously taken breath, the great chest lifting and falling with such effort that breath at last came to the watchers with a sort of sympathetic agony, and they both seemed to quit their own lives to have their only consciousness in the struggle of the paralyzed man.

As the dawn began to yellow the lamp-light Scott tiptoed to the door with a man's heavy effort at quietness, Anne followed him into the kitchen and closed the door as if afraid to disturb the sleeper. Her face had lost its color and she looked at Scott with entreaty.

"You will come back soon," she said "Oh! and do bring the doctor."

"That is all?" he asked, and afraid to trust her voice again Anne nodded and turned back to her father's room.

There was no change all day. Once or twice Anne tried to arouse him but the sound of her own voice in the empty house coming back to her ears was too heart sickening, and she had been sitting silently watching him for several hours when she started up at the sound of feet upon the shakes outside the door. Her heart beat frantically but when she opened the door Scott stood alone outside.

"I have failed," he said, "The doctor would not come with me. It is too far into the woods for him to come away from his other patients, he says. He has given me medicine and told me all that can be done. He says this is probably partial paralysis and if this is the first stroke there is no need for you to be much frightened. I will go again if there is any change."

Together the two returned to Carter's bed and Scott told Anne all that the doctor had said.

A strange life followed for this man and woman thrown suddenly into the intense intimacy of the sick room. From the first they assumed the burden together, but in the absorption of endless detail neither remembered that the life was strange. The danger was much less than they imagined, and as Carter gradually regained consciousness and showed improvement, they shared the rebound of relief in an unspoken sympathy that flashed from eye and smile, and on this common ground met in perfect harmony.

One morning, as Scott was swinging a brisk axe splitting wood for the fire, Anne came to kitchen door with a platter on which was heaped up a fluffy pile of the whites of whipped eggs, which she was lashing into yet firmer lightness.

"I came to tell you that the wood box is empty," she called.

"It won't be so long," replied the wood chopper, shivering off a fresh chunk of wood.

The light hollow sound of the egg whip against the china dish died away and the kitchen door closed again. Presently Scott pushed it open with his knee and came in, his arm loaded up with wood to his chin.

"Drop it gently," Anne said, looking up from stirring the whites into a bowl of yellow batter. "He's sound asleep."

Scott dropped the wood and came and stood behind Anne as she was holding up a lifted sieve, like the appealing Vestal Virgin.

"Anne" he said suddenly, "I wish you would marry me."

She started so violently that a shower of flour sifted to the floor. "I love dearly, Anne; I want you for my wife." Scott drew closer and tried to see her face but holding firmly to the sieve, Anne moved away.

"Anne, sweetheart, you know how I love you. Tell me that you do care for me."

"I don't know," she said.

"Don't know! How can you help knowing when I know so well. Oh! Anne how can I make you see?" and with sudden desperation he reached forward and took the sieve from her relaxed grasp and putting it on the table, with a sense of victory took her hands in his and said:

"You do love me, Anne, but I want to hear you say it."

"No, No!" she cried, snatching her hands from his "I can't say it. I—I'm making muffins." And she reached out mechanically for the bowl, but her hand met Scott's instead.

"You shall never finish them until you say just what I tell you."

And it ended that way.

A BIG MONTANA ENTERPRISE.

A change in tariff laws often produces unexpected results. No one in Montana could well have foreseen last winter that the passage of the McKinley bill would lead to the immediate investment of half a million dollars of New York capital in the Gallatin Valley, in that State, but this was precisely what followed. The new tariff imposed a very heavy duty on barley. Eastern brewers had obtained most of their barley from the Dominion under the low duty rate of the old law. A few sagacious New York men, believing last winter that the bill would pass, went out to Montana and satisfied themselves that the soil, climate and facilities for irrigation in the Gallatin Valley made that region a peculiarly favorable one for raising barley. Within a few weeks after the bill became a law they had bought several thousand acres of land from the Northern Pacific Railroad Company, and besides a number of old farms; all this land being so situated that it could be irrigated from a canal to be taken out of the West Gallatin River. Twenty miles of the canal are already completed and the water carried in it has done its work in maturing a magnificent crop of barley on the lands of the new company. Elevators have been built to store the crop, farm machinery, including a steam plow purchased and the old village of Moreland given fresh life under the new name of Manhattan. The Manhattan Company has expended already about \$500,000 and is going to build ten miles more of main canal before its irrigation system is perfected. It is composed of shrewd business men with large capital, who know what they are about and where the profit is coming from for their liberal investment.

The Northern Pacific in the construction of its sleeping cars for transcontinental service put a check upon the deliberate selfishness with which many a woman will take possession of the dressing room in the morning and hold it against all comers while she goes through an elaborate toilet. There are no locks to the dressing room doors in these cars, but in order to afford complete security from public gaze a heavy curtain is hung inside the door and though the latter may be opened the interior of the room or its occupants cannot be seen by any one outside. This feature will be heartily appreciated by the hundreds of women travelers who have occasion to cry out against the dressing room monopolist.—*St. Paul Dispatch.*

How many of our Southern Minnesota readers know the origin of the name of the pretty river Zumbro? The early French traders called it La Riviere des Embarras, on account of the difficulties they encountered in poling their boats up its current and this in time became corrupted by the American settlers into Zumbro.

RECOLLECTIONS OF A MAN OF FIFTY

Fourth Article.

The farm epoch of my life closed when I was eleven years old. My father sold his ninety acres for thirty dollars an acre—a good price in those days, although it did not represent a dollar a day for the labor actually put upon the land in clearing and fencing it, and in the erection of house and barns. The family removed to the Center of Randolph, where my father worked for a few months in the store of a friend. Every township on the Western Reserve of Ohio has a small village located as near its geographical center as is practicable and known throughout the township simply as the Center. Here are to be found one or two stores, two or three churches, a school-house of somewhat larger size than those in the rural districts, a shoemaker's shop, and a blacksmith shop. In the time of my boyhood there was usually a local tannery, a wheelwright capable of renewing any part of a wagon, and perhaps a small factory for making furniture out of hard maple wood, but those industries were long ago killed off by the large establishments in the towns. The Center, forty years ago, was the intellectual focus of the little community. A debating society met once a week during the winter; there was a Good Templars' lodge, and the women had a sewing circle which worked for some charitable object and circulated the gossip of the entire township. At the stores the men gathered to talk politics, religion and the crops. Very good talk, there was, too, around the big stove, in a group of farmers seated on the counters or on boxes and barrels. I have heard in later life, and in many parts of the country, East, West, North and South, more really good conversation from farmers than from city people. The reason is that in the country men have time to think for themselves and do not get their ideas from the newspapers as much as do the busier folks of the cities. In the city people are very much alike in their intellectual make-up and their talk for the most part runs on two or three recent events. In the country there are many cranks and oddities, but most geniuses and men of mark originate there. Men have a chance to develop their own characters and are not worn into smooth conformity to general standards by friction with others. The intelligent American farmer thinks out his politics and religion for himself, understands and appreciates our republican system of government, keeps carefully the run of all important public affairs, and is a reservoir of pithy anecdotes and quaint proverbs and sayings that give zest to his conversation. He studies men individually and not in a mass, and rarely makes a mistake in his judgment of character. His horizon may be narrow but he knows thoroughly all that lies within his range of keen observation. I think that the best part of my early education was derived from the talks of the neighboring farmers who came on Sundays to my father's house, or when I listened at the store while waiting for an order for tea or sugar to be weighed and wrapped up.

My life at the Center enlarged the horizon of my boyish mind. It was something to pass the two stores on my way to school and to hear the ring of the blacksmith's anvil; something, too, to watch the working of the saw mill on the creek and to see for the first time a steam engine, that ran the machinery of a little turning mill, where rude furniture was made. The little Congregational

"meeting-house," with its glittering, tinted steeple, seemed a noble cathedral to my childish mind. The merchant, who benevolently gave me a stick of peppermint candy, now and then, appeared to me a famous traveler, because he had actually ridden on a railroad and seen New York City. My world was larger than it had been on the farm. Here, too, I had my first experience of "going home with a girl." It was the custom of the older children to pair off after spelling-school was over, the lads escorting the girls home, and one memorable night I plucked up courage to offer my company to the girl I liked best, a black-eyed maid of ten years. It was accepted and I was rewarded with a kiss at parting on her doorstep. The adventure so excited my poor little brain that I could not get to sleep till after midnight, and for a long time afterwards used to build day dreams of the time when we would be grown people and would marry and have farm of our own. A boy's romance is just as real to him as a man's and it is much more loyal and unselfish, but most of us forget this when we are older and jest rather cruelly at times at the little loves of the little folks.

Before taking leave of the boy period of my life let me recall a few matters connected with farm life in Northern Ohio forty years ago that I have not already touched upon. Certain traditional notions concerning the influence of the moon were commonly held by farmers. A general rule was that all crops which mature in the ground must be planted in the dark of the moon and all that bear their fruit above the ground must be planted when the moon is growing. Shingles must be laid when the moon is on the wane, otherwise they would curl up and make a ragged-looking roof. For the same reason a rail fence was built in the wane of the moon to ensure its standing firmly on the ground. These ideas are not yet wholly out of date. Speaking lately to a friend from Jamestown, North Dakota, whose boyhood was spent in Pennsylvania, I was surprised to hear that he still believes that there is something in them. "Take a board," he said, "and lay it on your lawn for two days when the moon is on the increase and mark the effect upon the grass; then place the same board on another spot when the moon is waning, and you will see that the mark it leaves is much deeper than the first one." I have not yet tried the experiment but I intend to. Singular, is it not, that while the moon superstitions are still prevalent in rural communities, scientists are beginning to doubt the old, accepted theory that the moon causes the tides. Some now say that the tidal ebb and flow is the electric pulse beat of the planet and that the moon has nothing to do with this rhythmic phenomenon. I have always been a half-way believer in the theory that our earth is a living organism, going through the various stages of life process from birth to death and that it has its planetary spirit. In studying the various forms and expressions of religious belief it seems to me that few devotees get beyond our own planet in their conception of deity. What they worship is at best only a God of this earth, not a God of the universe. In earlier stages of civilization men have a God for each tribe; later come the national gods, such as Osiris of the Egyptians, Jupiter of the Athenians and Jehovah of the Jews. Still later, in the progress of thought comes the conception of a God of this earth, having all races and nations of men in his absolute control and devising for their benefit certain schemes of salvation by which they can escape his wrath—a sort of enlarged Oriental despot placed up in the blue heavens, whom his subject must praise without ceasing and obey without question.

Many minor superstitions were current in the time of my boyhood. Men hung herbs in the chimney to drive away the witches and to make

sure that their guns would shoot accurately. Hogs were killed at a certain stage of the moon, or the pork would shrink in the pot. If you cut off a chicken's head and held the carcass in your hand while the blood was running, that hand would forever after tremble with paralysis. It was unlucky for a woman to drop a dish cloth. If your right ear itched somebody was speaking well of you and if your left ear itched somebody was speaking ill of you. Your knife and fork must not be crossed on your plate after eating or your plans would be crossed by ill luck. There was a lingering, though faint, belief in witches, inherited from our Puritan ancestors, and any old woman who lived alone and was seen gathering herbs in the fields was pretty sure to be looked on with suspicion.

The first railroad was built through our part of Ohio between 1849 and 1852, three years being consumed in the construction of about sixty miles of track. The farmers had little faith in the new form of transportation. They were sure it would never pay and they argued that a few teams would be sufficient to haul all the produce out of the country. Dreadful tales of railway accidents were told and few were disposed to trust themselves to this perilous mode of travel. I remember a popular song that was current at the time, the first verse of which ran as follows:

If you want to take a railroad it will go pretty nice,
If you want to take a railroad it will go pretty nice,
If you want to take a railroad it will go pretty nice,
But you'd better go afoot, for that's half price.
They go very fast, the truth I'll declare,
They go very fast, the truth I'll declare,
They go very fast, the truth I'll declare,
It takes one man to hold on to another man's hair.

Farm wages in the fifties in Ohio were very low in comparison with those of the present day. Young men could get ten or twelve dollars a month during the summer, with board, but eight dollars was considered very fair wages the year through. Girls worked at domestic service for seventy-five cents or a dollar a week and were expected to spin in the evening after the dishes were washed. Men received seventy-five cents a day for working in the hay field and one dollar for harvesting. Young men who taught school were paid from ten to fifteen dollars a month, but young women teachers were lucky if they received a dollar a week. Wheat, the staple crop of the region, brought from seventy-five cents to a dollar a bushel, and farmers had very little else to sell except young cattle, for corn and oats were too bulky to bear transportation to Eastern markets at the rates then charged by the canal and lake. The money of the day consisted of bills of State banks, all subject to varying rates of discount, except those of New York banks and of the State Bank of Ohio. Every merchant received a weekly publication which gave the current discounts in New York on Indiana, Michigan, Kentucky and other Western bank notes—and they sometimes ran as high as twenty-five cents on the dollar—gave the names of numerous broken banks, whose notes were worthless, and concluded with a formidable list of counterfeit bills in circulation. Some of the counterfeits were so good that the "Indicator" would say, after describing them: "Better refuse all notes of this bank." The poor farmer, who had sold a steer or a load of wheat, would hasten to the store with his money and examine the "Indicator" with fear and trembling to see whether he had been defrauded with bad bills. All paper currency was looked on with suspicion, but there was very little specie in circulation. A gold coin was rare. A half dollar was the largest silver coin. So little silver was furnished by the government that Spanish pieces of a quarter of a dollar in value were more numerous than American coins of that denomination. I remember, too, that there were many foreign coins which passed for twelve and a half cents, and

were called shillings, and also sixpences, worth six and a quarter cents. Postage was five cents on letters traveling less than 250 miles, ten cents on those going more than 250 and less than 500 miles, and increased in this ratio up to twenty-five cents. The receiver of the letter always had to pay the postage. If I remember right postage stamps came into use about 1850 and three cents was then established as a universal rate of postage throughout the United States. Envelopes were introduced about the same time. Before this useful invention was made people wrote on large sheets of paper, leaving the last page blank for the address, folding the letter so as to conceal the writing and fastening it with a wafer.

A TOWN WITH A FUTURE.

The town of Enumclaw, in King County, Washington, is becoming quite widely known and its present prospects for future greatness are very bright. It is situated in the upper White River Valley on the main line of the Northern Pacific Railroad, thirty-two miles east of Tacoma and about the same distance from Seattle. Five miles from Enumclaw stands a very high, bluffy mountain, from which the town takes its name. The Indian tradition is that many moons ago, when the white man was unknown to the inhabitants, a band of Indians were encamped near its base, when one evening a great rattling, rolling sound was heard, which seemed to them to come from the interior of the mountain. Being very superstitious, they imagined the noise to be the work of some evil spirit and hastened away. The mountain was then named by them "Enumclaw," meaning "evil spirit," and to this day many tribes of Indians dare not venture near the supposed abode of the evil spirit.

The land of the White River Valley is especially adapted to the raising of hops, hay and fruit. The area of farming land tributary to Enumclaw is greater than that surrounding any other town in the State, and in quality the soil is said to be fully equal to that of the already famous Puyallup Valley in the same State. Hops average 2,000 pounds to the acre and are of the best quality. There are several hay farms in the locality that pay their owners handsome profits and it requires but little labor to care for the crop.

Immense quantities of the best of fir, cedar and spruce timber are growing within a short distance of town and already negotiations are being made for the location of a large saw mill at Enumclaw. New buildings are being erected and newcomers arriving, and everything points toward an era of prosperity when the great hop crop is gathered in.

There are at present two general merchandise stores, a blacksmith shop, millinery store, two hotels, meat market, livery stable, barber shop, general newspaper, etc., and a company have just purchased property upon which a two-story brick block will be erected at once. A bank has been organized and will occupy a portion of the new building.

A. G. ROGERS.

A REMARKABLE ROUTE.—How long will it be before people can go to Europe easily and quickly by way of Alaska and Siberia? Railroad men say that it will not be long. American capitalists have already fully made up their minds to connect Alaska with our own railroad systems by a trans-Canadian line—a precedent established by the American connections of the Grand Trunk line. The Bering strait is easily bridged, or is narrow enough to be but a slight matter in any case. On the other side, the Russian government is pushing its trans-Siberian line with considerable energy, mainly, of course, for military purposes. So it should not be so very long before traveled Yankees are enabled to get into Europe by the back door.

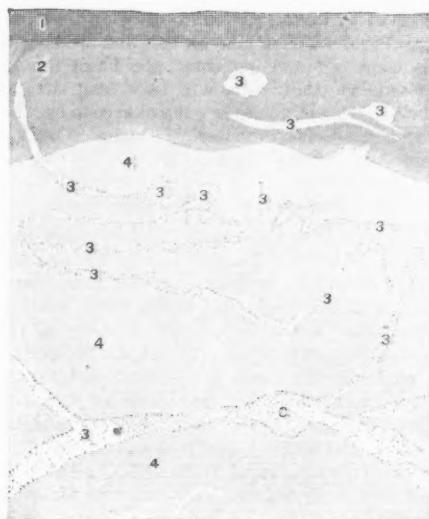
DAKOTA'S SUBTERRANEAN WATERS.

BY A. T. COLE.

In the January number of this magazine there appeared an article from my pen, followed by another in the February number, both written from Ellendale, North Dakota. They contained in brief a few feeble hints at the geology of the Dakotas. In this paper I propose to go a little more into details in regard to some features, with a view of giving the reader, who has not visited that grand expanse of billowy prairie, some more definite ideas in regard to the manner in which the "far-reaching and misty plain" has been built up, and some of the advantages as well as disadvantages to be met with by man, on what was at one time known as the "Great American Desert." The first thing in order at this time, and the most opportune, is the matter of a water supply. As is well known, in many parts of the two Dakotas, well water is lacking in quantity and brackish, bitter, and even detrimental to the system, in quality. Besides this there are comparatively few streams in those same regions, and Nature frequently refuses to precipitate enough moisture from the clouds to ensure the raising of crops and nurture in growth the rich and sweet grasses upon which the stock of the farmer live and thrive during mild winters, almost wholly by their own efforts. Besides this, at the present time irrigation is being urged as a means of supplying the deficiency of nature, and thus artificially providing for an assurance of a bountiful harvest to the husbandman, barring the accident of cyclone and hail.

First in order then, we must consider what may be properly termed the "eccentricities" of Nature in depositing the soil. In digging wells, very frequently the seeming unaccountable experience of sinking four or five wells within the radius of a few rods, to the depth often of more than a hundred feet, and getting no water, and then sinking another well next to or even in the midst of those others and getting an abundant supply at a depth of from twenty-five to forty feet is met with. In the attached rough sketches this eccentricity is explained. Sketch No. 1 exhibits in the rough the peculiar condition in which the different kinds of soil or earthy matter is most frequently found deposited in the region to which this article is devoted. The strata marked is the top soil or black loam varying in thickness from eight inches to two or three feet. No. 2 is the brown or red clay, being usually many feet in depth or thickness. No. 3 represents the eccentric deposit of sand. No. 4 is the ever present deposit of blue clay. It will be seen by noticing the veins of sand that they are irregular, some being comparatively near the surface and obtaining their limited water supply from "surface soakings." In some places this sand is found only in "pockets," no vein leading in or out, and consequently in striking one of these the well digger must continue on to obtain a permanent supply of water. To the left of Figure 1 is a vein of sand extending upward nearly to the top of the brown or red clay and terminating in a pocket in the blue clay. In striking one of these in digging into the earth, a supply of water is struck which may rise several feet in height in the well, but, being wholly dependent on what finds its way into this short and abruptly terminated thread of sand from the surrounding soil, it makes but a scanty and imperfect supply of unwholesome water. Farther down in the blue clay (No. 4, representing blue clay,) is seen a strong vein of sand through which flows a permanent supply of water. When this is struck a greater or less never-failing supply of water is secured, although these wells may often be pumped temporarily dry. In Figure 2 is explained the curious fact of a number of wells being sunk to a great depth within the space of

Fig. 1.



a few rods without obtaining water, and then sinking another well within the same space and getting an abundant supply in a comparatively shallow depth. No. 1 is the black loam or top soil, 2 the red or brown clay, 3 blue clay, and 4 a vein of water-bearing sand. If the figure here drawn be considered as but a few rods in extent it can readily be seen how a number of wells might be dug to a considerable depth without striking water, and another sunk and an abundant supply obtained at a much less depth.

For the present this much by the way of explanation of the supply of well water will suffice, although I intend to deal with it more fully in a

Fig. 2.

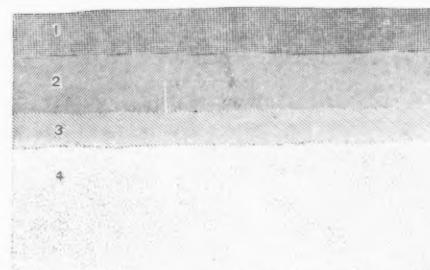


subsequent article. We now pass on to briefly consider the deposits of sand as they are often found. In figure three we have the regular order of deposit. No. 1, top soil, 2 red clay, 3 gravel, and 4 sand. In figure four we have another of those eccentricities which so often characterize the work of nature in the Dakotas. No 1 is the top soil, No. 2 brown clay, and No. 3 sand. It will be noticed here that the sand appears in a "heap" the top of which is very near the top soil, and if dug for in the right place is easily gotten at. But, in digging if one should happen to avoid the right spot no sand would be gotten unless at a very great depth. The quality of sand, that is the fineness, varies much and as a whole is of rather a coarse variety. The color

is the common dark brown and the particles are of a flinty character. The nice, white variety found in other sections are almost if not wholly unknown here. West of the Missouri, and in a few cases east of the same stream, great sand hills abound in certain localities. Of the nature and formation of these and the sands that compose them I shall have something to say in a future article.

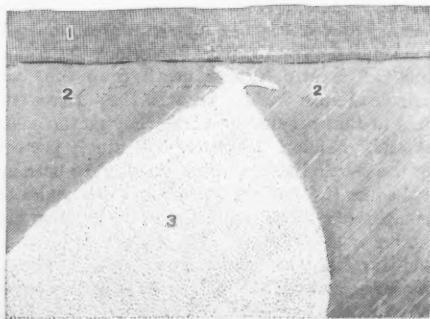
The reader who desires to follow these articles and become acquainted in a measure with the geology of the Dakotas should carefully keep in mind these preliminary observations. Besides noting the conditions under which water is obtained, and something of the deposits of sand, etc., it should be noted that the order observed in the accompanying sketches does not obtain throughout every particular locality. In some places may be found beds of volcanic ashes and in other places distinctly marked fields of lava, great heaps of cinders, stratified; thin deposits of clay, the remains of ancient lake beds, transported glaciated rock, etc., and throughout the entire section of country evidences of the gigantic work of Nature during the formative period of the

Fig. 3.



earth's history. Having said thus much by the way of introduction it is proper to proceed to a more minute consideration of matters of detail. The outline so far given inevitably leads to the conclusion that the former "great American desert" needs to be scientifically understood in order that man may "conquer it for his own" and likewise make it productive and profitable to his touch. One of the peculiarities of the soil needs especial mention. The top part or black loam, while being hard, (rather than tough,) until subdued, becomes loose and powdery when cultivated, while the clay subsoil is seemingly as hard and tough as leather. This fact has much to do with the effect of the drought or hot, dry winds on growing crops. The top soil having become loose by cultivation readily absorbs and as readily lets go of moisture, while the tough consistency only of the subsoil does not permit of its ready penetration by the falling rain or melting snow and as a consequence the hot winds which blow over those "boundless prairies" literally lifts the moisture from the fields and floats it away, leaving the grain badly scorched and often almost entirely destroyed.

Fig. 4.

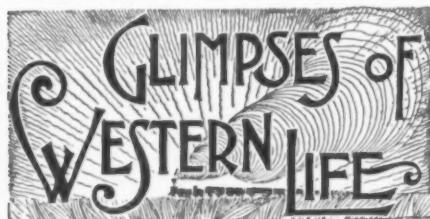


The overflow of population having moved into and occupied the "arid region," as it is commonly called, it has become a matter of prime importance that that vast extent of country should be made secure if possible or aided as much as may be in protecting itself against what might be called the frowns of nature. In order to do this the geological history and character of the country should be carefully studied. It is in the hope of assisting in a measure towards accomplishing this end, and likewise interest, if possible, the general reader in this western country, that these articles are prepared. As the experienced miner tells by indications and outcroppings where mineral or metal may be found, so should the farmer and the business man by the study of the handiwork of nature learn to know how to coax Mother Earth to bear good fruit, even where they might be laboring against some natural disadvantages. As a matter of fact to start with let it be understood that the great plains were once a part of the great sea or ocean and subsequently became dry land, in turn to be submerged or inundated and becoming a great inland sea or lake, gradually however, again becoming a part of the present dry land, although not until in the process of losing its water it broke into numerous lakes of various sizes, which have in turn nearly all dried by leaving nothing but the sometimes well defined, sometimes ill-defined outlines to mark the limit of their boundaries. Of these lake beds I shall have something of importance to say in the future. It may be well to note here that before closing this series of articles, some reflections and theories regarding the great chain of lakes marking the boundary between Canada and this United States, will be advanced. Geology, together with the other branches of science, is in its infancy. Much that has been put forth as established fact must of necessity undergo revision to conform to new light that is breaking forth. The laws of the Medes and Persians in Bible times were said not to be subject to change, but science by reason of its evolutionary character is continually building onward and upward. Much that has been heretofore regarded as settled fact is seen in the light of further investigation to be but a misconception or an improper deduction of matters in the realm of science.

MINERALS ON THE OKANOGAN.

Hon. Hiram F. Smith, commonly known as Okanogan Smith, came in with Major I. T. Keene and Major Gwyder, the Indian enumerator. Mr. Smith built the first building in Ruby City, and was the founder of the great Okanogan Supply Company. When asked in what year he went to Okanogan, he replied truthfully, "The year Methuselah was born." He is very proud of his orchard of 3,000 peach trees and his three acres of grapes. He is the possessor of fourteen mineral claims, seven of which have just been surveyed, and he can fit a man out with any kind of a mine he wants—gold, silver, copper, lead, iron or nickel. Most of the claims are within a radius of two miles of his house. Among them are a big hematite iron mine, a nickel mine with a seven-foot vein of solid ore, and a copper mine with a vein of solid ore many feet thick. He reports a wonderful strike of mica made by Theodore Cruger, across the line in British Columbia. Slabs of clear mica taken from the surface measure eight by ten inches, and no one knows how large they may be underneath.—*Spokane Falls Chronicle.*

A Wyoming man who has investigated says prairie dogs obtain water for drinking by digging wells. Each village has one with a concealed opening. He says he knows of several of these wells from fifty to 200 feet deep, each having a circular stairway leading down to the water.



Col. Visscher's Dog.

Among the notables who have been attracted here by the races during the present week is the Fairhaven humorist and poet, Col. Will L. Visscher. The colonel revels in the possession of a dog, a St. Bernard pup, about four months old, but nearly as large as "Jack," the Tacoma hotel bear. To prevent the pup from being stolen the following, designating the brute's ownership, appears on its collar:

I belong to Will L. Visscher,
A plain newspaper man,
Who named me for a friend of his
Don Caesar de Bazan.

The engraver has been made to put the accent on the "plain."—*Seattle Telegraph*.

The State Flower.

State Superintendent Harroun has not received complete returns of the vote cast on Arbor Day for State flower, but has little doubt that the syringa has been selected by a large majority. This shrub and flower are indigenous to Idaho. In its wild state it has generally five petals corresponding with the Star of Idaho. When cultivated it oftener has four petals, but frequently five. It is of a pure white and as beautiful as fragrant. The choice is in good taste, and henceforth the poets of Idaho will be taxing their memories and extending their researches through the labyrinthine intricacies of Webster's Unabridged in the selection of words that will rhyme with syringa.—*Boise City Statesman*.

Wild Horses in the Okanogan.

For some years a small band of wild horses have been known to roam the rugged mountains that rise from the river banks. The arts and skill of mountaineer and plainsman have been exerted to entrap the wary animals, but their subtle scent and fleetness of foot defied near approach until just recently. A few days ago a fine horse was missing from the neighborhood. A handsome reward being offered for its return, John Owens started on a search expedition, and his quest led him to the stamping grounds of the wild animals. After great exertion and stratagem, he finally captured four of the band, which he now has corralled at his home. They are fine, fiery American stock, and bear no evidence of ever having been broken. One of them he has since broken to bridle, and this he was riding at the time of telling of his strange adventure.—*Idaho's Ruby, Wash., Miner*.

Material for a Romance.

Unexcelled as material for a romance is the story of Frank Woosley and John Brock, who left Springfield, Ohio, together fifteen years ago. They went to a Texas ranch to raise cattle. For some reason best known to himself, one day Woosley disappeared utterly, as completely as if he had vanished from the face of the earth. Cowboys and miners have a way of reaching conclusions quickly, and at once it was suspected that his partner had murdered and made away with Woosley. Brock was arrested and only by the skin of his teeth escaped being strung up to the nearest tree. He did get out of the lynchers' clutches alive however. From that day on he had one object in life. It was the finding of his lost partner. On this depended the establishing of his good name among men. He was either a deeply injured man or a suspected

murderer. He vowed his life and such fortune as he had to finding Woosley. He found a trace at length and followed it to the end. At last he has found him, alive and pursuing his way like an ordinary mortal. He had known of his former partner's search for him, but kept silent. The rest of the story is that Brock has now sued Woosley for \$20,000 damages in not discovering himself and thus proving Brock's innocence.

A Second Jonah Come to Port.

The bark Guy C. Goss, with a cargo of \$500,000 worth of tea, dropped anchor in Tacoma on July 25, forty-four days from Yokohama, long overdue. When fifteen days out, "Tom" Hiskiaski, a Japanese sailor, mounted to the topsail to reef it during a gale. A lurch of the vessel threw him headlong into the sea, and he was seen suddenly to disappear. The lifeboat was put out, but no trace of the missing sailor was found. When returning to the vessel, a whale rose to the surface. The crew then suspected what had become of Hiskiaski. The whale seemed to be in great distress. Suddenly, after a violent convulsion, Hiskiaski was thrown from the whale's mouth on to the crest of a wave and upon the deck of the Goss. He was unconscious and badly injured. Careful nursing brought him around, and he is now in his normal health. Captain Mallette vouches for the truth of this story, and the sailor was pointed out.

Cartloads of Carp.

Near old Fort Nisqually is Lake Tolmie, named after the good old doctor who was the respected chief factor of the Hudson Bay Company in these parts. Eight years ago Johnnie Huggins stocked it with young carp from the government fish car. They thrived, and now are of immense size.

Although they are quite numerous, they can only be taken by shooting. The large population of East Rosston depend upon them entirely for food fish. The lake is located entirely within the city limits, so the town ordinance against shooting inside the town borders is wisely suspended by general consent. The Mayor of Boston recently shot on block 13,824, a carp that dressed nineteen pounds from tip to tip. He made a feast for the police department.

The carp is a queer bird; he carries his teeth back in his throat, so that when he has a sore throat he does not know whether to send for the doctor or the dentist. He resembles the cow in that he chews his cud. It is a pity that some of the other virtues of the cow do not also pertain to the carp, for he would be a much more useful fish if this were so, although it would not be possible for him to give milk, owing to the destruction of every drop of it by the water in which he lives.—*Puyallup, Wash., Commerce*.

Not all Liars.

The Bellingham Bay *Express* thus forcefully and justly resents a too common imputation cast upon the craft by those who know little or nothing of the facts. Many eastern readers and new arrivals, when they read the articles published about the State of Washington referring to the climate, forests, coal, minerals, fish, enormous crops and other opportunities to make money, say, "Oh, the liars," then look at the map, and find us still further north than they are, are dead sure we lie, because they have been taught that the further north they go the colder it gets. Reader, the writer and ninety per cent of the people living on this coast were born and raised in the eastern states, and can make the comparison. The man who has never been here knows nothing of it. We dislike to have our old-time eastern schoolmates, sisters, fathers, mothers, and friends call us liars and boomers. We tell you, honestly and sincerely, this is the

grandest part of this country. Come and share its pleasures and joy with us. If this country is no good, as some of you say, there are no strings tied to us, we can get back. If your assertion is good that we have land for sale and are booming it, come out and get some, the finest that lies outdoors at that. You will be a long time east before some of you ever get a chance to be a land boomer. Come west and you will soon be as enthusiastic as the balance of us.

Beavers in the Yellowstone Park.

In what is now called the Yellowstone National Park, I have found beaver houses built of large logs, containing space enough to contain a family of people, though the rooms were not high enough. Once I saw a large company of their carpenters on a strike. They had a regular riot, and finally the whole party went off down the creek and left the old boss alone, as glum as the proprietor of a set of coke ovens at Scottsdale, Penn., and without any recourse in the way of new importations of Huns, Fins, Italians and Pinkerton detectives. Most people think beavers build dams to catch fish, but that is an egregious error; they build them to back up the water so as to float green willows to their houses. They live on willow bark. You can no more induce a beaver to eat a fish than you can get a coyote to touch a dead Mexican Greaser. Kitten beaver make the choicest firs. The pelts of beaver taken in summer are worthless. An Eastern paper says:

"It has been found impossible to maintain beavers in the Philadelphia Zoo. They would not bear restraint and did not take kindly to artificial homes. A constant watch was needed to prevent the animals from escaping from the wire inclosure and cutting down the valuable trees in the vicinity. Logs were laid beside the stream in the inclosure and one family partially constructed a house. Before it was finished, however, the entire colony died, and the attempt to cultivate the perverse animal was given up in disgust."

You see the Philadelphia Zoo gardener starved his beavers to death when he prevented them from cutting down the trees and getting some bark to eat.—*R. Freeman in Washington Farmer*.

The Frontier Home in Washington.

To some of our eastern readers who are unfamiliar with the conditions and attributes of pioneer life in the frontier forests, it may be interesting to know that log houses were seldom built by the pioneers who pushed out into the forests in advance of wagon roads and sawmills. The frontier house in this country is almost invariably built of "shakes," which are nothing more nor less than slabs split from the great straight trees of cedar. Lumber thus manufactured with the axe is usually not more than an inch thick, from one to two feet wide, and as long as the house is high. It may be made in any length desired. The edges are trimmed smooth, and cracks are battened with strips of the same material. Shingles and floors are made of the same material, and in the same way. The shingles are about two feet long, half an inch thick, and when lapped on the roof there is about eighteen inches of exposure below the lap. They shed water perfectly. Houses thus constructed are not specially handsome, but they are comfortable. Cedar is used because it is easily split in thin slabs, and is not liable to shrink or warp. The pioneer home in this country is necessarily isolated from human surroundings, because of the dense forests to be penetrated, but pioneering here is not attended by the privations to which those who first settled the prairie lands of the central states were subjected. There are no ferocious beasts nor poisonous reptiles in the timber, so pioneering is unattended by terror.

Fish, berries and game furnish luxuries to the table of the frontiersman that are the envy of his pompous city cousin.—*Hamilton, Wash., Herald.*

Sioux Indians and Cow Boys.

A correspondent of the Philadelphia *Times*, who signs himself "Cowpuncher" writes as follows:

"My first experience with the Sioux Indians in their native country occurred while riding for a horse-raising outfit, located on the western edge of the Sioux reservation.

"The ranch manager had gone to Deadwood, about one hundred miles south of the ranch, for a supply of provisions for the winter, and I was left alone to prevent the range horses from straying too far on the reservation. My nearest neighbors were twenty-five miles distant, so I was truly 'monarch of all I surveyed.' Once, after a hard day's ride, I returned to the ranch, towards evening, and was surprised to see two young Sioux bucks leading a couple of my horses from the stable. As my hair was quite long at that time, and knowing their preference for a well-covered scalp, I decided to watch their movements before venturing closer, and was still more surprised to see them water the horses, return them to the stable and give them some hay. I then rode boldly up to them, saluted and invited them to dine with me, an invitation that was accepted with haste, and from the amount of food they consumed I concluded that their solicitude for the welfare of my horse was not entirely disinterested.

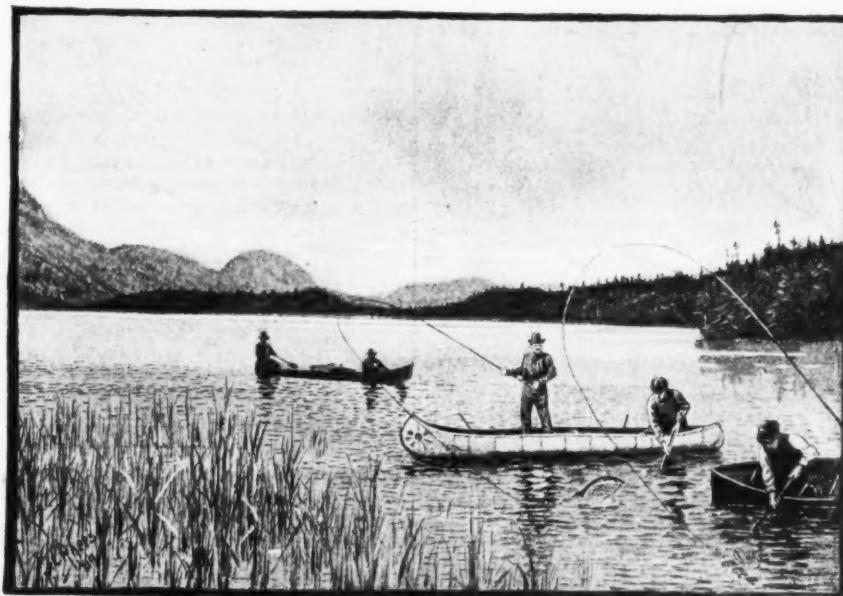
"After the meal, while rolling cigarettes for them, of which they are as fond as the average dude, one of them who delighted in the name of 'One-Sock-in-the-Wash,' produced a primer, and by signs gave me to understand he wished to learn to read, so I taught him his letters and he learned quickly. He stayed all night with me, his brother having taken their horses to their camp, and was as peaceable as a dead Indian, except when after retiring he made a murderous onslaught on the bed-bugs, after which he relapsed into dignified silence and let 'em bite.

"My fees as tutor consisted of hams of venison, moccasins and an invitation to dine with him. So one day on passing their tepee the old chief, father of my pupil, cordially bade me 'Get down.' I alighted and one squaw picketed my horse while another prepared dinner. I was hungry and ate heartily. When I had finished the old chief, pointing to the meat, said: 'How you like um?' 'Good,' I answered. 'Heap good,' he said, 'dog.' I quickly stepped behind the tepee, and with the aid of my finger as an emetic was soon rid of the 'dog,' my host watching my misery with evident satisfaction.

"He was a great hunter and once come by the ranch with four deer he had killed piled on the back of a five-hundred-pound pony and himself on top of the heap.

"The Sioux methods of identifying the graves of their dead are very peculiar. I remember once seeing one of their headstones. It was a flat piece of wood, on which was rudely cut the figure of a man in the act of catching a bird. A half-breed informed me his name was 'Man-Chasing-a-Bird.' I thought how would they mark the graves of 'Left-Handed-Thunder' or 'Man-Who-Eats-in-His-Sleep.'

"Once while on the Crow reservation I saw one of that tribe who wished to be considered 'bad.' He would eat no food from a plate, but would throw it on the ground, then eat it like a wolf or any other wild animal. At Fort Custer a Crow scout, the only survivor of Custer's troops engaged in the terrible massacre, was pointed out to me. He escaped by throwing a Sioux blanket over his head. There is another survivor that it would not do to overlook. That



A SURE CATCH.



From "OUTING."

FULL SWING.

is old 'Comanche,' the horse that belonged to one of the officers. He still lives and is the pet of his company. The old fellow is dun in color, bears the scars of his many wounds, and has a pension allowing him full rations and relieving him from all duty during his lifetime. He is the first and only horse ever pensioned by the government and is now with his company somewhere in Texas.

"In many places in the East the word 'cow-boy' is used, many people immediately picture a long haired, fierce looking monster, with knives between his teeth, and on every available part of his person not already having a six-shooter attached to it, or they may feel inclined to agree with the little Boston girl who said 'Mamma do cow-boys eat hay?' and received for a reply 'No darling they're part human.' I was one of them for several years, and a more manly, light hearted, charitable set of men I have yet to meet with. While the majority are not well educated men, some are, and they nearly all seem to possess a large share of the 'milk of human kindness.'

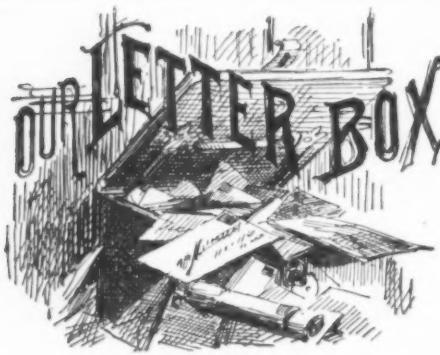
"A stranger is made as welcome at a cow-ranch as if he paid his bill in advance, and no compensation is either expected or would be

taken. I have yet to see one of the boys wearing the long hair credited to them, nor have I ever seen a man's life threatened or taken by a cow-boy.

They are the finest riders in the world, and have a great contempt for the style of riding popular in the East. I saw one of the boys last summer, who, after seeing an Eastern man pass riding his own way, immediately sneaked to the nearest saloon and got gloriously drunk, as he said, to drown his recollection of the sight."

DECEPTION PASS, PUGET SOUND.

Two massive walls of stone, thick-seamed and brown,
On either side the clinging, crooked firs,
And far beneath where no soft zephyr stirs,
Where all is shadowed by the ledge's frown,
The water, black and cold, in slumber lies,
So still it seems with gently heaving breast
We say "Twill ne'er be broken of its rest
Until a storm comes sweeping from the skies."
But lo! between these storm-swept battlements
The swift tide pours, a tumbled torrent tears
Against each jutting crag, while swirling seas, snow-white,
Rise into hills of foam and rear huge tents;
The whirlpool rushes past and onward bears
Within its mighty cup the gloom of night.
—Herbert Bashford in *Pacific Magazine*.



Farming North and South.

DULUTH, MINN., July 10, 1891.

To the Editor of The Northwest Magazine:

There is much in the Northwestern farmer's life to make him worry and fret, and the flea of discontent is continually prancing under his flannel shirt. But it seems to me his lot is not particularly hard and stony nor his row so very bad for stumps. Comparing his condition with that of the Southern farmer or planter, I think the Northern man appears to as much advantage as the Berkshire compared with the razor-back. It is not the object of this article to discuss the causes that work to the advantage of the Northern agriculturist, but to place him side by side with his Southern brother as before a looking glass, hoping it may cause him to better appreciate his situation.

The Southern man is indolent and has no ambition. No one is more ready to acknowledge this than himself. He knows it is the climate that makes him so, and that you would be as lazy as he is if you had lived where the sun shines on both sides of the lane all day and the nights are too short to cool the feverish earth. Next to keeping a sleepy man awake perhaps the hardest punishment is compelling a lazy man to work. Hard work, therefore, under a blazing sun in an enervating climate is hard work indeed. The Dakota farmer plowing in April with an overcoat on his back, is a comfortable man compared with the Louisiana planter cultivating the cane in a sun hot enough to cook his liver, fighting gnats, flies and jiggers and keeping a sharp eye out for snakes. Cold weather is easily fought with woolen clothing and fuel, but heat is hard to escape. Weather that keeps one in a state of "continual dissolution and thaw" is not conducive to health and pleasure either to man or beast. I think it safe to say that twice as much field work can be done with more comfort and ease by the Northwest farmer almost any day than the Southern farm hand does. Of course most of the Southern farm labor is done by the negro. He works hard enough while he is at it, but he is very shiftless and unreliable and never thorough. "Befo' the wah," he was housed, fed, clothed, doctored and watched by his master at an expense that generally offset his unpaid labor. Now he shifts for himself, finds clothes and food for self and wife and pickaninnies, and works fourteen hours a day for seventy-five cents, but he is free and happy. He would not sell his liberty for all the cotton in the South, and the white man wouldn't want him in slavery again, for he gets his labor cheaper now. Strange; isn't it, that the question so tremendously important to the colored man, and really of no consequence to his white master—freedom or slavery of the negro—was the principal cause of a long and bloody war between the whites, while the people most interested remained comparatively neutral? Once in a while an industrious Southern negro is seen cultivating his own land, or, in the city, driving his own team, but most of them are shiftless and shiftless, living from hand to mouth, dancing or coon hunting all night and snoozing all day,

never caring for a job as long as there's four bits in the pocket. With such "help" to depend on the southern planter is not to be envied by the Northwestern farmer, surrounded by thrifty Swedes and Norwegians, and as for house servants one of our good-natured German or Scandinavian kitchen girls is worth a dozen colored Emelines who are very seldom tidy, truthful and capable, and whose cooking knowledge consists in boiling black and bitter coffee, baking indigestible biscuits and frying bacon and potatoes. The worried and pestered Minnesota farmer's wife would be "plum crazy" before harvest was over if she had to depend on one of those slow, dawdling, touchy and careless colored women for kitchen work. Northern people with their nervous, fretful, and excitable dispositions find the Southern negroes very exasperating. The Southerners all take things easy, are never in a hurry, and prefer to do-to-morrow what should be done to-day.

One great disappointment to the Northern man on his first trip South is to find grass so scarce. With the exception of the Kentucky and Tennessee valleys, and Western Louisiana and Texas, the South is a very poor grass country. Texas, outside the Northeastern timber belt, being a prairie State, has plenty of prairie grass, but no blue grass or clover. The other Southern States are, or were, at one time, generally timbered, and the farms and pastures are but patches of clearing. For some reason the Bermuda is the only grass that thrives, and it is not very plenty, and never grows rank, and is not a meadow grass. In the bayous and sloughs there is a coarse grass which our northern cattle would hardly touch even if sprinkled with brine, but which Southern cows relish, and I have often seen them wade into the water three or four feet deep and actually dive for this grass. Even in the celebrated Blue Grass Region of Kentucky, grass isn't as fine and thrifty as in Northern Minnesota, especially about Lake Superior. This lack of grass is the principal reason of the South's inferiority as an agricultural country, no farming community can prosper without stock, and stock can't prosper without grass. The greater part of the South is a very poor stock country, and it is emphatically a one-horse country. Two-horse teams are the exception, one-mule rigs the rule. Either the roads are bad because much of the travel is done on horseback or else traveling is done on horseback because the roads are bad. I don't know which but on the saddle is the principal mode of travel. The Dakota farmer who makes a trip of less than fifty miles in a day thinks his team has hardly earned its oats, but twenty miles a day is considered a "right smart distance" in the South. Few teams can make it, and if the horses could stand such fast driving the wagon would probably give out. Such clothes line, dog chain and twine contrivances as they use for harness! Such squealing, loose-jointed, wibbly-wobbly rattle-traps for vehicles! Everywhere you see one-horse plows, one-horse cultivators, one-horse harrows and one-horse wagons and carts. Outside of Kentucky and portions of Tennessee good horses, even in the towns are scarce and don't stay good very long. Poor excuses for horses are driven or ridden long after the buzzards were entitled to them, and would even excite the pity of a Jew junk dealer, perhaps the cruelest horse driver in the North.

Most cattle are small, scrawny and of inferior breeds. There are a few, very few creameries in the South, and nearly all the good butter used comes from the North. Genuine cream, in the best hotels and private houses is an unknown article, condensed milk is the stuff. It is used everywhere by everybody. It turns your muddy-black coffee into a mulatto color. It is sticky and looks like the white of an addled egg. Even

in prairie Texas where one can sometimes from one point see 50,000 cattle grazing around him, cream is unknown, milk is ten to twelve cents a quart and scarce, butter is shipped in from Kansas and Illinois creameries, and condensed milk is on every table. Cows, cows everywhere, and not one drop of milk to drink. Milking cows never a joyful task anywhere, is a hard job in hot weather with millions of buzzing, biting insects about. Then, without ice and refrigerators even the milk of human kindness won't keep long, and making butter from sour cream hardly pays.

The razor-back hog is a typical product of the South. He is popular with southern farmers not only because he can outrun a nigger, but also because his sides make lovely bacon. It is said, but probably is not true that when he is lifted by the ears and his head barely balances the body he is fit to kill. However, he is usually about as fat as most live stock is in the South, for he can eat anything from a beech-nut to a pickaninny. The goat also flourishes in the South, but I never heard of one being milked, and as the natives are too lazy to shear them or skin the kids, I never understood why they were raised unless as assistant scavengers to the buzzard. The latter is rather overworked during the hot season in small towns, for dead animals are never buried.

Cotton in the South is the undisputed king. It is the most profitable crop, though sugar cane pays better in portions of Louisiana and Texas. Portions of Tennessee and Kentucky grow good wheat, and these and a few other states are noted for tobacco crops. None of the southern states raise very much corn. Cotton is the great crop. It is always salable, from the time it matures, in the field or at the gin. It is also mortgageable, and the two-per-cent-a-month chattel mortgage fiend is, as in the Northwest, ever ready to "accommodate" the poor planter. Half to one bale per acre is a fair crop and \$35 to \$40 a bale (500 lbs.) is a good price in the country markets. The seed pays for the ginning and handling and hauling is not expensive. But the crop is sometimes poor; it has its enemies as well as wheat, and seeding, cultivating, and picking cotton represents much labor, especially picking. (I think three cents a pound.) By the time the labor is paid for, the dockage for dirt, etc., deducted, the chattel mortgages "lifted," the store keeper's bill settled (very often he is the cotton buyer) and a few necessary supplies and much unnecessary tobacco has been bought, the crop is gone, and Mr. Planter is ready to start on a new crop with new accounts and new mortgages. Luckily his family's wants are few. Shoes are luxuries; furniture, plain and little of it; fuel nothing, clothing scanty and thin. In many families of poor whites tobacco equals all other family expenses. I say "family," because it is not uncommon to see the whole brood from boys six years old to the toothless grandmother using tobacco, and the Southerner that don't use tobacco is a freak. Corn is grown for feed only in most Southern States and in several portions isn't grown at all. From inquiries I made in Kentucky as to tobacco raising I learned that an average of \$50 per acre is considered good pay for a successful crop, and one man has hard work planting, cultivating and curing the tobacco raised on three acres. Unless he can get something to do in winter besides coon hunting his annual income is hardly large enough to excite the envy of a socialist. The big money in cotton as well as tobacco is made by the factors and shippers handling it, and the brokers in the exchanges, just as much as in the North one elevator man often makes as much money on a crop of wheat as twenty-five farmers—[then like a sucker buys options on the board of trade and loses it all.]

Fruit-raising for Northern markets is perhaps

the most profitable occupation of the Southern land owner, except manufacturing lumber. But fruit-raising is an uncertain business, successful in spots and districts only, and often disastrous. A few years ago orange crops in Louisiana and portions of Mississippi were paying immensely. One cold night in the winter of 1885 water froze an inch thick. Good-bye orange groves! There is seldom one to be seen there now. Truck farming pays well enough about the large cities. So it does in the North, and the Northern fruit grower has no more vicissitudes to contend with than his Southern brother. If his vines blossom late and his trees do not bloom till June, they will give him one crop a year, anyhow, and that's as much as the Southern trees and vines will do and no more, and the fruit's slow growth in the North gives it a sweeter flavor.

Many fortunes have been made by Northern lumbermen in the South during the past ten years, on account of the extraordinary demand for lumber in the booming South American cities, and the exceedingly low prices of stumps, but the millions were made by Northwestern lumbermen during the same decade. In fact, there is no industry in the South but pays better in the North, and no agricultural product except cotton, rice and sugar, but can be grown with more profit in the North. The only Southern State that compares at all with the Northwest in agriculture is Texas, and it is indeed great, but principally in size. As a cotton producer it will in a few years lead all other States by several large figures.

The Northern farmer who settles in the South finds that his stock requires more care in the summer to protect it from the deadly screw worm, the gnat and other venomous insects that sometimes destroy whole herds, than it requires to winter it during the most blizzardy winter in the North. All insects seem poisonous in the South. A little mite of a mosquito no bigger than a fly's leg will leave with his sting a swelling in remembrance of his visit as big as a nickel. No mosquito bars are used in the windows and doors of houses, but each bed has an awkward bothersome affair called a canopy over which is suspended a dozen yards or more of mosquito cloth, under which the sleeper is supposed to be protected. But it is seldom that a half dozen or more mosquitoes don't find their way inside where they are free from various competition and have nice picnics. Why in the South, where the housefly never dies and the gnat is immortal, they have no window screens is a mystery which I've never heard explained except that screens are supposed to keep out the breeze, and the breeze is indispensable.

But more disagreeable than all insects and snakes, and the perpendicular rays of the sun, will the intelligent, well-informed Northwestern farmer in the South, find association with the country people, white and black. The illiteracy, the dense ignorance, the filthy habits, the exasperating sloth and unreliability of the poor whites; the immoral, untruthful, trifling and touchy disposition of the negro; the general want of common sense, practical knowledge and skill so painfully apparent among his neighbors, will make neighborly intercourse very unpleasant, and yet he must be "neighborly" or he will step on a yellow jacket's nest. Of course there are exceptions to this as to every other rule, but some idea of the general ignorance may be had from the statistics showing that in Alabama, for instance, there are more illiterate whites than blacks.

I have pointed out as fully as the length of this article will permit some of the objections to Southern rural life. The great objection to the Northwest is the cold in winter. As far as concerns rain and drouth, cyclones and tornadoes, blight, rust, hail, worms, bugs and other enemies

of the farmer, the South is as subject to them as any part of the country, and has them the year round. The Northwest winter at least frees us of hundreds of discomforts, gives us life and energy, great sports on ice and snow, long and pleasant evenings by the fireside for pleasure and culture, and above all, bright eyes, ruddy cheeks and good health.

A. L. LANGELLIER.

Irrigating the Pasco Plain.

PASCO, WASH., Aug. 16, 1891.

To the Editor of *The Northwest Magazine*:

Knowing that great interest is felt in the development and success of many parts of the West where irrigation is required, I will give you an outline of proposed plans of operation for the watering of Franklin County, State of Washington. First, we will say that this is the central county in, or portion of, what is commonly called the great "Inland Empire," lying between the Columbia and Snake rivers, immediately at their junction. Being located at the confluence of two great rivers, also a railroad center, we believe that when watered it will be the banner county of the wonderful State of Washington. As to the richness of the soil none doubt its extraordinary capacity for production when properly watered; therefore the citizens have set to work to accomplish this end. Many plans have been suggested but until now we think none that would have proven perfect success. Our first great effort (suggested by a prominent Montana man of large experience,) was to put in pumping plants costing about \$75,000 to raise the water sufficiently high to cover about 20,000 acres lying in and around Pasco. This, with the expense of digging ditches, etc., would have cost us perhaps \$130,000 or \$6.50 per acre, besides the expense of keeping pumps in operation. Later it has been clearly demonstrated that we can turn the entire Palouse River upon our soil, watering 200,000 acres of fine land at a cost not to exceed \$600,000 or three dollars per acre. When this has been completed it can be said, and none will attempt to contradict or even doubt, that it will be the most desirable land in the State, having the low altitude that fits it for the raising of grapes, peaches, apricots, almonds and other tender fruits, as well as tobacco, peanuts, melons and all variety of vegetables.

The ditch will necessarily have to be sixty-five or seventy miles long, but nearly the entire length will be through good land, thus guaranteeing to the investors a certainty that is seldom found. Parties backing this enterprise are of our own country, together with some Chicago capitalists, which gives us every reason to believe that it will be completed at no distant day, and when done, that the country will move as none has yet done in the west. Franklin County is the smoothest or most level of any in the State. So when watered well beyond all question it will soon be as it were a village over the entire district watered, as it will evidently be owned in small tracts and planted in fruit trees of every kind, making it to our State as Riverside is to California.

Irrigation has been tried in many places in our country and has proven a grand success; therefore there is in this no experiment, but a perfect success warranted. The Palouse River has an abundant supply of water at the seasons of the year when most needed, heading as it does in the higher parts of the State and Idaho. This river drains what now is known to be one of the most wonderful wheat belts in the world. The two counties alone out of which this river flows will this year produce between 15,000,000 and 18,000,000 bushels of wheat, besides other grains, fruits and vegetables. We believe that if only half the truth were told as to the future of Franklin County, when watered, it would be

called a fairy tale, but suffice it to say to the readers of your valuable magazine, "Keep your eye on Franklin County," and see its advancement during the next few years, for certainly there is an unprecedented future, having the finest climate in the world, and with navigable rivers on either side, and already the railroad center of this great inland empire. Believing we have said enough we leave it to your readers to watch and see the light burn.

I. N. MUNCY, *Editor Pasco Headlight*.

Irrigation in New Mexico.

EDDY, NEW MEXICO, July 30, 1891.

To the Editor of *The Northwest Magazine*:

A few notes from this place may interest some of your many readers. We have here one of the richest valleys in the world. It is thirty to forty miles wide, 300 miles long and as level as a floor. The Pecos River, which flows through the valley, carries a bounteous supply of water and is fed by hundreds of living springs from its source to its mouth.

An extensive system of irrigating canals is now in the course of building, 120 miles of which are already completed. Over 400,000 acres of rich lands have been reclaimed by these canals, at least twenty per cent of which are in the hands of the Government, subject to entry under the homestead laws.

A railway has lately been built into the valley, so that farmers now have a direct outlet for their products. We have the same climatic and soil conditions as exist in southern California; and being 1,000 miles nearer to Eastern markets, this valley is destined to become, in the near future, as rich a fruit country as any portion of that State.

I shall be glad to give additional information to any one who may desire it.

G. O. SHIELDS.

EVEN BEYOND.

Death: more subtle than thought;
Substanceless, powerful, wrought
With terror and menace and mist.
Pierced, and we say, "He is not,"
Yet more is he then than our thought
Can measure: the mortal grown
So small in mortality,
It, forgetting, has flown
Far to a great unknown.

Yet as I wept last night,
The world all cold and white,
I heard you, love, on the inner side,
Never my tears could you abide,
Beat 'till the drift grew so frail and thin
Almost it seemed I could enter in;
Only the joy was so great in my heart
When I knew you had rent the drift apart,
And you clasped me so close to comfort me.
It blinded my eyes so I could not see.

FLORENCE R. BACON.

WHEN WE SHALL MEET.

When we shall meet, tho' many months have lapsed
Since we first met where we shall meet to-day,
Hands will again in truest love be clasped;
Undimmed by time love still exerts its sway.

In years agone—how swiftly flown meanwhile—
We were a lover and a sweetheart then—
When we shall meet! speed fast the time ere while.
When we shall meet! Ah, joyous, happy when.

MATT W. ALDERSON.

A CURIOUS BEE STORY.—A Tulare County, Cal., paper prints this little story on its readers: A number of bees selected the garret of a local church for a hive, storing in it many tons of honey. The recent hot weather caused the wax to melt, which loosened the store of sweetness. The weight was too heavy for the church rafters to hold and the whole partition of the roof caved in over the pulpit. The church pews and pulpit were completely buried in honey and melting wax.



How many moods great Nature doth possess!
In ever varying voices she appeals;
And, ever changeful, spreads before our eyes
Forms fraught with deepest meanings.

Yon proud crags
That tower heavenward, how glad are they
To bear upon their rude and rugged breasts
Th' inspiring thought, "Use Wiggins' Liver Pills."
Yon meadow gleaming verdant 'neath the sun
Is't not more fair for that upon the fence
That bars it from the dusty road beyond?
It bears the motto: "Cummings' Cure for Corns?"
There's not a rude pine board that flanks the road
So rough and humble that it cannot tell
A message to th' observing passer-by:
The weary travelers here the legends trace:
"Use Dobbin's Porous Plasters and Be Saved;"
"Plum's Soap" and "Jinks' Sarsaparilla for the Blood."
The stately oaks raise their majestic heads
Seemingly that their trunks may forth proclaim
That "Biles' Consumption Balm will Cure Your Cough."
So Nature speaks to him who wends his way
Not blindly, but with his open ears and eyes,
Eager for knowledge learned in Nature's school.
Soon may we hope that bounteous Nature's book
Will be one boundless advertising page,
One vast, eternal druggist's catalogue.

Lots of Coaxing Required.

Casselton girls are smart as well as pretty. Colonel Plummer, in his remarks on Independence Day, quoted the proverb that "Man proposes but God disposes." One of his young lady hearers suggested, as an amendment, that "man proposes—but it takes lots of coaxing to get him to do so."

A Bad Misprint.

Misprints and typographical errors make the editor's life a burden about Fourth of July times. An editor meant to compliment a young lady at a party by noting that "her dainty feet were encased in shoes that might have been taken for fairy boots." When it appeared in the paper the printer made him say, "her dirty feet were encased in shoes that might have been taken for ferry boats."

Amenities of Journalism in Montana.

The Bitter Root Bugle, a sort of bay stallion poster publication, vociferously exclaims that it is under one management. Hon. John N. Armstrong is the proprietor of this immense plant. He tamely intimates that we are a drunkard. We must confess this to be a fact. We had rather be an inebriate and touch our sin-stained lips to the wine cup forty times a day—than to be a buzzard-headed chump.—Red Lodge, Mont., Picket.

Wants to be a City.

Now, why cannot we have a municipal government. We boast more numbers than Virginia City, got more voters than Billings, and feel a dum sight bigger than Helena. We must have a form of government that will cause the oil cans, brick bats and other brick-a-bracks removal from the plaza. We want some law that will lengthen out the streets. One set of avenues run northeast by southwest, and the others northwest by southeast, and the balance run like the boys, to suit themselves. Then we want a fire department, police and all the rest of the pomp and glory of a full fledged city government. No joking, we are really in need of a municipal form of government and trust our citizens will get a move on themselves. We know of but one

obstacle and that is the selection of our first mayor. In order that the play can go on, we will condescend to fill the mayoralty ourselves, during the first term.—Red Lodge, Mont., Picket.

A Cloud Buster.

We spoke once before about that rain crank. Admitting him to be a brilliant success as a rain fetcher and cloud buster, we have no use for his services during our present series of deluges. However, we have no objection to his visiting Bozeman with his patent cloud extractor as we have a tip to the effect that the cold water apostles of that cranky hamlet are short of water in the little brown jugs behind their respective doors.—Red Lodge, Mont., Picket.

Editorial Generosity.

City Editor—"I say, Jenkins, you made a first rate job of that expose of the evils of the contract labor system and the employment of small children in factories."

Jenkins—(modestly) "I am glad to hear you say so, sir. It was rather tough, the three days that I carried the hod among the workingmen."

City Editor—"Have you finished writing up your drop from a balloon?"

Jenkins—"Yes, sir; but it was lucky that I only sprained my left arm making the descent. I couldn't well have written it up if I had broken both arms."

City Editor—"Well, Jenkins, take a day off and recuperate. Report here Thursday and I will detail you to catch the smallpox and write up your experience at the pest-house. The M. E. advised me that we must curtail expenses in the local rooms. Your lay off will be considered as a vacation, but we will allow you half pay while you are lying on your back doing nothing.—Spokane Spokesman.

He Knew how to Drive Cattle.

A good story is told of how Capt. Tainter once hired a new driver for the woods. A great raw-boned, lanky, chaw-me-up sort of a chap called on him.

"Say, boss, they tell me yer in want of an ox driver?"

"What do you know about oxen?" replied Cap, looking disdainfully at the fellow.

"Calkerlate I know enough ter come in when't rains."

"Guess you know all about that; never saw one of your set that wasn't posted on the weather," replied the brave captain, as he handed the newcomer a prodder. "Here, take hold of that and let me see how you drive."

"Whar's your cattle, boss?"

"Just make believe I'm a pair."

"All right, boss," replied the chap, as he seized hold of the prodder, and as he tapped the valiant captain smartly across the shoulder, shouted at him to "Get up! and gee, wha!"

But the captain never stirred.

"Yer won't gee, won't yer? —

I'll soon see whether you'll gee or not!" and he jammed the prodder into Cap's flank, causing the lumber king to give a jump and yelp at the same time. "I thought you'd get a move on yer. Der yer want any more proof?"

"No, you rascal!" roared Cap. "You are hired. Drop that prod, will you?"

The newcomer made the best teamster the company ever had.

The Fertile Soil of Washington.

Some years ago General Solomon was making political speeches up in Washington Territory and one day he alighted from a train at a railway station to "speak to the people." He planted himself on a small eminence near by and turned loose the soul of him in a torrent of eloquence. "My fellow citizens," he said, among

other things, "your destiny is assured. With such a country, and such a climate, and such a soil, what may not Washington become? In this soil"—here he stooped and scraped up a handful of it—"I seem to see the very seeds of empire! In this red earth—which looks as if fertilized with the iron in the blood of your martyr pioneers—are latent the promise and possibility of the cotton of the South, the wheat of the North, the fruits and flowers of God's whole green earth! What will such a soil not grow? It will produce not only fruits and grains, but men and women of heroic mold; and as I now scatter this prolific earth to the four quarters of the earth, so shall your people spread upon the land and—and—in short, ladies and gentlemen, this generous soil—"

The orator's remarks were consumed in inextinguishable laughter; he was standing on the site of an old tannery, and the soil was oak bark! —Ambrose Bierce in *San Francisco Examiner*.

"Who Was de Odder Gemman."

The sleeping car porter faithfully gathers his "fifty cents all around," but as faithfully carries out his orders when the money is in sight. The *Hartford Post* tells how some man found it out by bitter experience:

"The president of one of our large insurance companies just returned from a Western trip relates the following good story. On the train going from Chicago to Dubuque, Iowa, was a passenger in one of the sleeping cars who had been drinking heavily, but realized the fact that he was intoxicated. As he was about to retire without disrobing he called a porter to him and, handing out a dollar, requested to be waked up at Rockford, Ill., and said he: "Be sure and put me off whether I want to go or not. I know I'm pretty full, and when I'm in this condition I'm likely to fight, but don't mind that, just put me off and it will be all right."

"The colored porter promised to do so, and the man was soon asleep in the berth.

"Early next morning as the train was nearing Dubuque and the passengers were hurriedly dressing, the colored porter was attending to his duties with his head bandaged, one eye closed and his face showing hard usage.

"Just then the Rockford passenger crawled out of his berth, looked out to get his bearings, and then went for the porter. 'Look here you —, what does this mean? Didn't I tell you to put me off at Rockford, you —?'

"The darky looked at him a moment and said: 'Is you de gemman what wanted to be put off?'

"Yes I'm the one you — —, and I gave you a dollar to see to it!"

"Well, if you's de gemman what give me dat dollar, what I wanter to know is dis yer, who was de gemman dat I put off at Rockford?"

"Our Ripsnorting Salutatory."

A quarterly newspaper devoted to the development of the mineral interests of Northeastern Wyoming and Eastern Montana has been started at Red Lodge, Montana, with the odd name of the *Stinkingwater Prospector*, derived from the principal creek that runs through the new mining district. The editor heads his announcement of his new venture "Our Ripsnorting Salutatory," and this is his article:

We make our gracious bow to the people of the world this morning—as flush and exultant in hope as a saucy bride, and our very soul exudes through the columns of the *Stinkingwater Prospector*. Journalism is the friend, the mainstay and the guardian angel of the masses, and it will make free speech forever a permanent fixture in this great and grand republic.

It will be our aim to turn the grindstone of the *Stinkingwater Prospector* for the public weal

and help sharpen the axes of the business men, and thoroughly advertise this portion of Montana, and as a recompense will want to borrow that axe—in the sense of liberal and continuous patronage.

We recognize but one God, and are no man's man, and will not be a lackey for any political cross-road charlatan, or tin-horn statesman in Montana, as we are not built on a truckling or brass-collar hypothesis. If there are any heavyweight or pudding-headed political scrubs in this State who think they can intimidate or bulldoze us by scurrilous remarks or base fabrications—they are bold, brilliant, blooming, meteoric and picturesque liars in every mark of the road.

The advertiser who rides in this journalistic car must expect to pay full fare in every instance, or he will surely be put off at the first station with other wild-eyed roosters of the genus *hobo*.

Our aim is high and our tone will be as pure as virgin gold. We aim to attain a prosperous growth, as our paper will be as free as the flowers of June. This paper will be sent to all free—irrespective of age, previous condition of poverty, political vassalage, church creed or nationality.

Bill Nye on the Portland Fair.

Robert W. Mitchell, who is superintendent of the Portland, Oregon, Exposition to be held this month, and is, besides a well-known journalist and a genial humorist, wrote a letter lately to Bill Nye asking his advice as to how to run the fair and what special features it would be well to introduce to attract visitors. Nye replied as follows:

NEW YORK, July 9, 1891.

Dear Robert: I am glad to know that you are to have a great Industrial Exposition in Portland, worthy of the wonderful country of which she is the metropolis. How you came to be the superintendent and secretary, I do not know. The Oregonians are a humor-loving people, and like to put up jobs on their neighbors. Possibly that has something to do with it.

You ask me how best to run the exposition and so I will try in as little space as possible, to do so. Having the Paris exposition still fresh in my memory, I feel like throwing out a few hints regarding the matter, which I know will be valuable.

Expositions should have in the first place, a spinal column of worthy and valuable exhibits, a sort of hat-rack, if you please, upon which to hang the popcorn privileges and other features which are of minor importance. The exposition must not be a gigantic box office with a slight annex of corn-shellers and patent bee-hives. People do not care to go a great distance to witness recent methods of pulling candy or making lemonade without the aid of lemons.

We should not, Mr. Superintendent, allow the commercial spirit to cast a gloom over nude art, nor our American thrift to get a cinch on science at such a time.

The exposition in Paris was a great success, because it was an entertainment and an education to see it, not because it was a big county fair with opportunities at every corner for the French peasant to test the strength of his lungs.

I warn you, first of all, as a superintendent, against the American commercial spirit which crops out at all times, but especially in an exposition. A sausage-stuffing machine is one of the most beautiful sights from a utilitarian standpoint that I ever saw, but it will not bring people from a distance. You must have something of art and beauty and an element of the wonderful. I would impress this upon you, for, taking the Paris exposition as a criterion, and you could use it that way if you wished to do so, the crowd was ever packed around the strange, the beauti-

ful and the wonderful. America and her exhibit were chiefly patronized by those who were paid a salary to work her churning and wave her starry banner free.

People who ride two miles behind a mamma horse and her young colt to a Fourth of July orgy and hear a free oration will stand a good deal of bombast and starry banner business, but when they pay an admission, friend Mitchell, they want to see or hear something that will remunerate them. Those who went to Paris from Poland and witnessed our American baking powder and swollen notions of ourselves have doubtless forgotten that part of it by this time, but they will always remember the beautiful fountains with water in them and the pictures and statuary.

Africa had an exhibit that ought to put a big blush as wide as a Swiss sunset on the face of the great civilized republic which does so much to send missionaries to the Congo. The diamond exhibit of that godless continent and the methods of working this somewhat expensive stone, attracted more attention than all our oatmeal and atmospheric pressure.

I am an American, Mr. Superintendent, and proud of the land which gave me birth, after which it had a long spell of extreme mental depression; but foreign nations will not put up a luncheon and come to see the Portland Exposition unless you give them something instructive and unusual.

You ask about the ballet. I am not the proper man for you to put that question to. You know that I am prejudiced in favor of the ballet, and so you should not ask me that question. But the exposition of '89 had, as one feature, the Algeria or stomach dance, which was a very drawing card indeed. It was an odd dance—wildly barbaric and a trifle on the decomposed Delsarte order, perhaps, with a beautiful Algerian girl in it of the Lalla Rookh variety, who, I afterwards learned, was a native of the Rue de Foi Gras. Many of the visitors went to see this dance several times, and this Algerian girl practically owned the town, and carried away with her, figuratively speaking, to her desert home, the cosmopolitan peals of those who witnessed her strange and yet graceful gambols. A two-year-old colt that has just forsaken the home nest and made his glad debut on the clover-studded lawn, is not a circumstance to the gladness and grace of that performance. You might think this over.

Punch and Judy would draw the English people. It is a bit of humor that appeals to the English, and yet it leaves the brain tissue unimpaired. It is a broad, yet pure humor, which is prompt in its action on the English mind, producing no dangerous relapse or secondary symptoms. Some kinds of humor are highly injurious to the British mind because they may recur to the mind at a future time when the victim is not prepared, or, still worse, the point of the joke may break out suddenly on a future generation and create much trouble. You might spring a subtle piece of humor on an Englishman and produce no appreciable effect, but think of his helpless grandchild on whom the humorous heritage might fall.

Punch and Judy will appeal to those who may not have seen anything to laugh at in Ethan Allen. You might try it.

Sam Jones is a good drawer. So is Sara Bernhardt. In fact, they are a pair of those. But we will let that pass. Sam is a straightforward preacher, cheerfully telling people what miserable hounds they are, and warning them to flee from the wrath to come, at so much per warn. He will not only bring thousands of curious people to your exposition, but he will save quite a lot of souls at the same time.

You speak of Mr. Gould in a show window shearing coupons off his bonds as a feature. I

would favor that, but you know, perhaps, that Mr. Gould cannot sit in a draft, especially a sight draft, as he has facial neuralgia or tic-doo. Do not depend upon him, for I am sure he could not come.

Your reference to Governor Hill is entirely unworthy of the important offices he holds. Governor Hill has no notion of becoming mayor of New York. His other offices entirely engross his attention. He could not give the office of mayor of New York that degree of espionage which it requires. A man who is governor of a great state, and senator also, while at the same time holding up his right hand and snapping his fingers constantly so that the office which may be engaged in seeking the man for 1892 will not forget his post office address, does not care to be mayor of New York, or open expositions with a few desultory remarks.

Ensilage should be cut as early as possible. Some use a teething ring for cutting their ensilage, but I think it injures the gooms. Gumquats are not popular in exposition restaurants generally, especially during the heated term. What are gumquats, anyhow?

Special days are not advisable unless you think it would be well to have special days, such as you suggest and feel certain would be successful. In that case if you felt assured that it would be advisable to do so, you might consider it a good plan to do so, and in case of success, you would, of course, be glad that you did so.

An exciting thing and a feature that has always drawn enormous crowds everywhere that it has been tried, is a discussion between two able men on vital questions, like this, for instance: "Is the Tariff a Tax?" So many people would be glad to get down off their dry goods boxes and make experiments with industry, if they only knew whether the tariff was a tax or not. As it is now, values are unsettled, industries languish, resources remain undeveloped, trade becomes atrophied, commerce ceases, and our shipping stands rotting at our docks. If you would solve this great question of whether or not the tariff is a tax, the air would be full of men getting down off the tops of rail fences, and the rattle of closing jack-knives would gladden the heart of every true American. Men, whose wives have been bringing in the wood ever since the war, would, I am convinced, take up the burden of life, and some of them would turn the clothes-wringer while their wives take in washing, if they could only know from some good, earnest thinker whether or not the tariff is or is not a tax—or not.

It is so, too, about religion. How many of us would take up the burden of life with true alacrity and true earnestness and true zeal and praiseworthy eagerness if we could know more regarding the existence and literary habits of a personal devil? How often would I arise in the morning, and, inserting myself into a pair of shimmering trousers from which the glad sunlight is reflected in a thousand different directions, go gaily forth to renewed effort and a more praiseworthy scuffle with sin if I knew whether or not the hosts of the opposition were or were not led by a personal devil—or not.

I would rather not speak of Mr. Sullivan, except in a non-partisan way, if you do not mind. I criticised his acting once, and from the way he acted the next time I saw him, I judged that he hated to be criticised in that way. He wishes me to say, however, that he is not drinking any now, and will elevate the stage again next season.

If you could erect a sort of glass conservatory or incubator, and set an old political wheel-horse on a recently discovered mare's nest, I think it would give good results. Did you ever try that? People would come for a long distance and pay good prices to see this, I think. Yours truly,

BILL NYE.

PORTLAND, OREGON.

Portland's Great Commercial Strength.

BY E. V. SMALLEY.

For nearly half its course the Columbia River runs in a southern direction. After it has made some progress on its way through the State of Washington it becomes erratic and forms three great bends; then it settles down again to a steady purpose and flows due west to the Pacific Ocean, forming in that final part of its pilgrimage the boundary between Oregon and Washington. About a hundred miles above its mouth it receives the placid waters of the Willamette, a beautiful river, fed by the snows and springs of the Cascade Mountains on the east and the Coast Mountains on the west, and draining one of the noblest and handsomest valleys in the world.

authority of the Hudson's Bay Company early in the century.

The valley of the Willamette, as nature made it, was mainly open prairie, interspersed with groves, and it was exceedingly attractive for settlement by reason of its beauty, fertility and agreeable climate. A large body of emigrants was led thither across the plains and over the Rocky Mountains in 1843 by the famous missionary, Marcus Whitman. In order to accelerate the occupancy of this fair land Congress passed the so-called "Donation Act," which gave to every married man settling in Oregon a mile square of land. Settlement increased rapidly under this stimulus during the decade prior to the Civil War. The settlers found that, remote as they were from the rest of the world, there was one crop they could raise which would bring them money. That crop was wheat. Ships could ascend the Columbia from the ocean to the

the river into the heart of the great, fertile valley and brought the bags of wheat down to Portland for transhipment to vessels bound around the Horn to European ports. These same sagacious business men of Portland built narrow gauge railways around the two chief obstacles to navigation on the Columbia, the Cascades Rapids and the Dalles, and they thus encouraged the settlement of the rolling plains of the Walla Walla Valley and the Palouse Country, and brought the wheat and wool from those regions down to swell the volume of their city's commerce. In later years they paralleled the Willamette on both sides with railways and aided Henry Villard to build up the Columbia to meet the advancing line of the Northern Pacific.

When the first through line of railroad was opened between Portland and the East, in 1883, the city had about 35,000 inhabitants and probably contained more rich men than any place of



PORLAND.—THE CITY HALL.

Portland stands on both banks of the Willamette, eleven miles above its junction with the Columbia. Why should the chief city of the Pacific Northwest be located at that particular place? Why not at the junction point of the two rivers? Why not at the mouth of the great river, close to the sea? Why not further up the Columbia? These are questions which readily occur to an inquiring mind familiar with Oregon and Washington only from the study of maps. Now, there are few cities in the country whose location so well illustrates the unbiased operations of the laws of trade, not influenced by speculation or even by railway construction, as strongly as Portland. It will, therefore, be interesting for us to learn why Portland became the city of Oregon, and of the basins of the Columbia and Willamette rivers in particular, instead of Astoria, the older town at the mouth of the Columbia, or Vancouver, on the Columbia, above the Willamette, which was the seat of the trade and political

Willamette and could go on a few miles up that river before they met with shallow water—not as far as the Falls of the Willamette, but to a point about midway between that cataract and the mouth of the stream. So the commercial city grew up at the point where the sea-going ship could get nearest to the grain fields. Fortunately at that point there was found a broad, handsome plateau on the west side of the river and another on the east side, so that no great struggle with natural obstacles was necessary to get the ground in shape for town-building.

A number of vigorous, shrewd young business men from the Atlantic Coast early saw the advantages of Portland's situation and established themselves there. They built steamboats to run on the Columbia and on the Willamette, both above and below the falls, and when Oregon was admitted as a State they had influence enough at Washington to get appropriations for a canal around the falls, so that their boats ran far up

its size in the world. It had grown wealthy by dealing in grain and wool, by manufacturing lumber and by controlling profitable transportation lines. It was a thorough city at that time—not an overgrown village. All its business operations and methods were those of a strong, confident, well-established center of commerce. Its jobbing houses carried large stocks brought in by sea from San Francisco and from the East by way of the Isthmus route, and extended credits all through the interior of Oregon and Washington. Its banks had accumulated large capital and were rated among the strongest in the country. It manufactured such articles as could be made from native woods and leather, constructed steamboats, smelted iron and built railways, made paper, engaged in salmon fishing, developed fruit culture and was thoroughly intelligent to grasp all business opportunities.

The first effect of the railroad to the East was not advantageous, for the new route admitted



PORLAND.—THE ARLINGTON CLUB HOUSE.



PORLAND.—THE CHAMBER OF COMMERCE BUILDING.

the jobbers of Chicago and St. Paul to territory before controlled by Portland merchants. There was sharp competition and a reduction of profits. Portland took no steps backward, however. She soon adapted herself to the new era of railroads and of the quick communication with Eastern cities which they brought. The Union Pacific opened a second through rail route to the East and soon after the Southern Pacific came into the control of the roads in the Willamette Valley, and linking them across the Siskiyou Mountains with its system in California created a third transcontinental line. For all these three routes Portland became a terminal point. The disadvantages of Eastern competition were more than compensated for by the extension of trade territory which resulted from all this railway building. The Oregon of the early epoch was limited to the Willamette Valley, and the Washington of that day was little more than a few lumbering hamlets on Puget Sound; whereas the new Oregon and the new Washington, created by the railroads, embraces large areas of rich agricultural country dotted with towns and villages, in what used to be the remote and almost inaccessible interior.

The railway era soon brought, however, what seemed for a time to be a new and serious menace to Portland's commercial supremacy. The Northern Pacific built a short line to Puget Sound across the Cascade Mountains, and thus diverted to Tacoma a large amount of grain shipment that used to find its only possible sea outlet by way of Portland. The young State of Washington went forward with gigantic strides. Two towns on Puget Sound made such phenomenal progress that they became independent commercial centers, and established jobbing houses and manufacturing plants, while in the interior, 500 miles distant, Spokane Falls made a scarcely less remarkable development. Tacoma and Seattle have now a population of about 45,000 each and Spokane counts 25,000 inhabitants. These places, so lately villages, dependent on Portland for their supplies, became cities, each supplying with goods and machinery a large area of country. Here was the crucial test of Portland's strength as a general trade center. She came out of the trial triumphant. She has added to her population since 1883 as many people as the total population of either of her young rivals, and now has 80,000 inhabitants. Her trade has increased in a direct ratio with the increase of her population. This great growth has been achieved in a quiet, undemonstrative way. Portland never has been a speculative place. Her business men have always been charged with

an excess of conservatism. They have never put up buildings for show or established new enterprises in advance of a demand for them. They were slow to annex the popular suburbs of the city across the river; slow to construct rapid transit lines, and slow to push up the prices of real estate and to carve up the neighboring farms and forests into city lots. These conservative business men did a very far-sighted and enterprising thing a few years ago, however, and they have kept it up ever since. Finding that they could not persuade the Oregon Legislature to establish a State Immigration Board, they established one themselves and maintained it with monthly subscriptions. For several years this board persistently and intelligently advertised the advantages of Oregon for new settlers. They said very little about Portland in the documents which they printed by the hundreds of thousands and scattered all over the United States, but they had a great deal to say about farming, wool-growing, cattle-raising, fruit culture, lumbering, the fisheries, minerals, climate, etc. Thus they attracted a large influx of substantial settlement to Oregon, and every new family was worth some hundreds of dollars annually to the trade of the city. Only very lately did the board spend money to advertise Portland directly—printing for this purpose a handsomely illustrated pamphlet for distribution to the guests of the new Portland hotel. To the sagacious labors of the Immigration Board much of the new prosperity of Portland is due. They realized that to boom towns without at the same time broadening out the basis of their support by filling up the adjacent country was like setting a pyramid on its apex and expecting it to stand firmly.

At the time when Portland's commercial position seemed to be threatened by the rapid growth of the Sound cities, which had a certain advantage in being upon a great, deep, unobstructed arm of the sea, the Government began the task of improving the entrance to the Columbia River. The bar off the mouth of this river was no more serious an obstacle than that which is formed by every great river in the world. Before anything had been done to deepen the channel across it large ships went in and out at high tide, and ocean steamers plied between Portland and San Francisco, arriving and departing on schedule time, as a rule, and with almost the regularity of railroad trains. Still, it was highly desirable in the interests of the commerce of Portland and all the Columbia Basin and the Willamette Valley that the entrance should be so narrowed and deepened as to be safe in all weathers. This is what the en-



PORTLAND.—THE MARQUAM BLOCK.



PORTLAND.—THE OREGONIAN BUILDING.



PORTLAND.—VIEW OF FIRST STREET, LOOKING SOUTH FROM THE SKIDMORE FOUNTAIN.

gineers are now doing. They planned a jetty three miles long, extending out to the outer edge of the bar from the cape on the south side of the river's mouth. Two miles of this enormous work are already completed and by the end of next year the whole structure will be finished. The work already done has had a marked effect on the bar and ship captains say that the entrance is already one of the best river entrances in the world. The jetty acts on the same principle as the Eads jetties at the mouth of the Mississippi. By narrowing the outlet for the waters of the river the current is accelerated and a scouring process begins which gradually wears down a deep channel over the bar. At present there are twenty-six feet of water at mean low tide on the Columbia bar and this will be increased to thirty feet on the completion of the long jetty next year. At the shoalest point between the river entrance and Portland the depth of water is twenty feet at low tide. The Government is now making arrangements to deepen the channel over the river bars so as to give it a reliable twenty-five feet.

Portland has in the Willamette Valley alone, with its great area of rich farming lands, its towns, its railroads, its navigable waters, its timber and its minerals, a supporting country capable, when fully developed, of maintaining a city of 200,000 people. This valley is so corralled by mountain ranges that its only natural outlet is down the Willamette to its old metropolis. The smaller valleys, which head in the Coast Mountains and run westward to the Pacific, are just beginning to attract settlement and will eventually support a considerable population. Eastern Oregon, by which is meant the larger part of the area of the State, lying east of the Cascade Mountains is to a great extent virgin territory. Much of it is adapted for pasture

only, but it contains several fine agricultural valleys. Its wheat surplus and its wool-clip already make a large figure in the commerce of Portland. The waters of the greater part of the State of Washington flow to the ocean through the Columbia River, which is Portland's highway to the seas. The costly canal blasted by the Government through the solid rock around the Cascades of the Columbia, is now nearly finished and will give unbroken navigation up to the Dalles. Around that more formidable obstacle it is proposed that the State shall construct a ship railway, that will take steamboats out of

the river, haul them ten miles and slide them down again into the water. This will surely be done at no distant day and Portland will be greatly benefitted by the extension of navigation into the heart of the Columbia Basin. A narrow gauge railroad around the Dalles of the Columbia, connecting with steamboats above and below the series of rapids, so that grain can take the river route, with transfers from rail to boat and from boat to rail, is now under construction, and will be finished this year. Portland capital aids this new enterprise. Meanwhile, the city has excellent direct railway communication with all the towns in that growing region and enjoys a large share of their trade. Her merchants feel secure in their knowledge that nothing can happen in the future in the way either of improvement of waterways or increase of railway facilities in the Pacific Northwest that will not be of immediate benefit to their city.

With a railway system reaching all parts of the productive territory of Oregon and Washington, and in the hands of three strong, rival corporations, with an open pathway for shipping to the sea, and with important projects for opening navigation on the Columbia far into the interior of Oregon and Washington, Portland's situation is commanding and secure. There is nothing now to be feared which may check her prosperous career. She has enough tributary territory in Oregon alone, in which she has no rival, to warrant expectations for her continued growth for many decades to come, as that territory increases in population and wealth, and she will always be in a position to hold a fair share of the trade of Washington and has no occasion to worry about the striking progress of the lusty young cities which have sprung up in that State.



PORTLAND.—FIRST NATIONAL BANK BUILDING.

PORTLAND'S BEAUTY AND PROSPERITY.

BY CONDE HAMLIN.

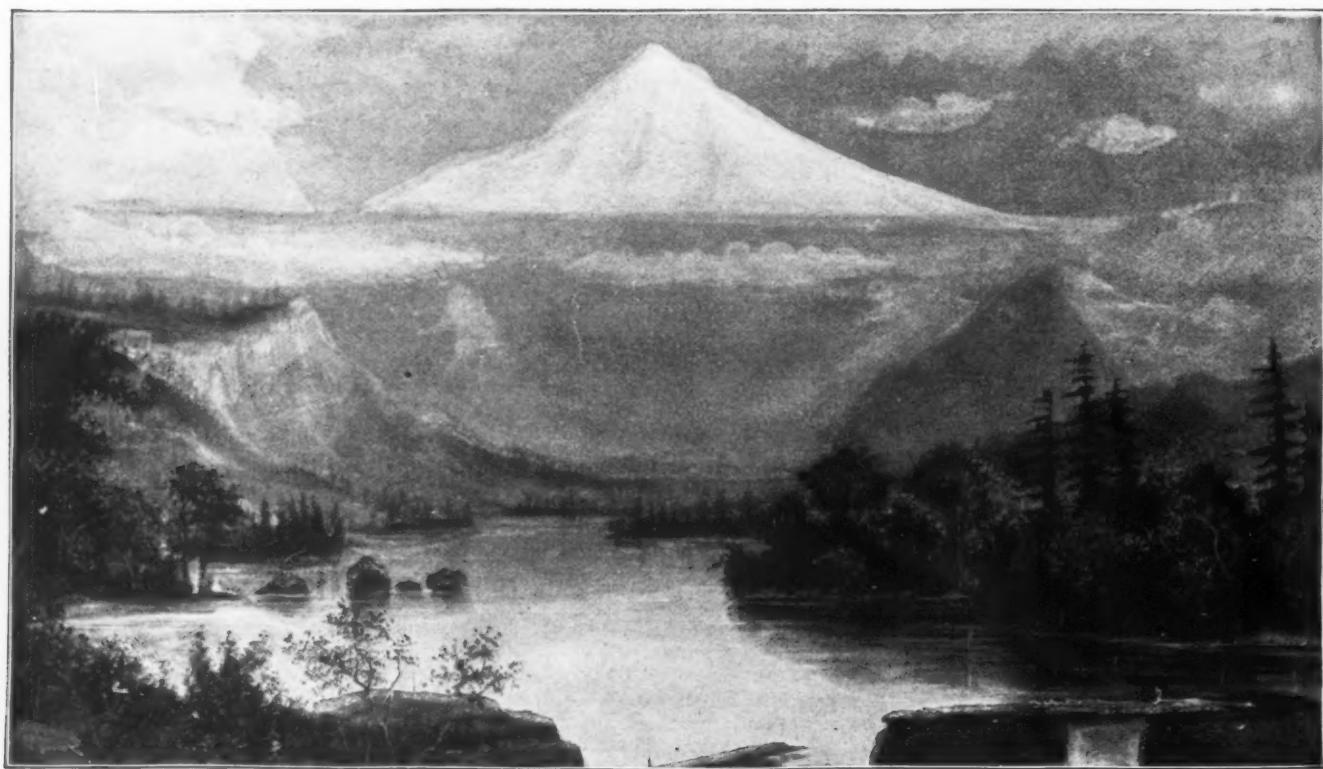
To find north of the forty-fifth parallel in North America a district of that famous country known as the "land of the lotos," whose boundaries while always indefinite are supposed to lie within tropical or sub-tropical limits, is something of a geographical surprise. To add to the assertion of this discovery the statement that in this favored section the *dolce far niente*, which is like a dream of rest to the inhabitants of most other portions of this wonderful continent, comes like a balm to outlaid energies instead of being a narcotic to all activity is, to invite the credulity of those who have never climbed the formidable wall of the Rockies and looked down upon a veritable land of promise.

To claim for Oregon these qualities which singly are the attractions of other sections is to claim what is always acknowledged by the cislantic traveler who has thoroughly explored

equally variant in characteristics. The conservatism of the successful East is there, confident of the future and unwilling to rush conditions to their logical results; the energy of the West is there ready to seize each trifling advantage and turn it to account in an effort to reach the super-superlative degree of prosperity; the easy going moderation of the South is there, which replenishes each outlay of strength and effort before making another draft upon the capital of resources. From these qualities alone would naturally come a magnificent race of people, strong and calm in action yet devoid of the feverish taints which sap the system. No environment could be more favorable to such an evolution and it is an almost certain prophecy that in the northwest corner of the United States there will arise a typical class of citizens famous for characteristics which are ever desirable in the human race.

There is always a natural capital to every geographical division of the country to which

esque while nothing is lacking in the staunch qualities for which the Atlantic Coast cities are famous. Life is brighter, fresher and more vigorous on the Western coast and this fact is everywhere apparent. The somber blocks of residences are here noticeable by their absence. Each residence has about it an individuality which is as surprising as delightful. In the doorways are rosebushes whose blooms would shame the choicest flowers of Eastern hot-houses. Vines clamber over gates and hide the fronts or sides of many homes in a veil of dark ivy or of the lighter Virginia creeper. Verandas tell the story of an atmosphere like velvet whose caressing touch is sought in outdoor hours. Bright colored awnings add their variety to the scene and hammocks are found everywhere. Now and then palms are discovered with their great fronds lending a tropical trait to the picture which is well-nigh deceptive unless reflection comes to the rescue. The great hills back of the city with their rugged fronts and coatings of



MOUNT HOOD, OREGON.

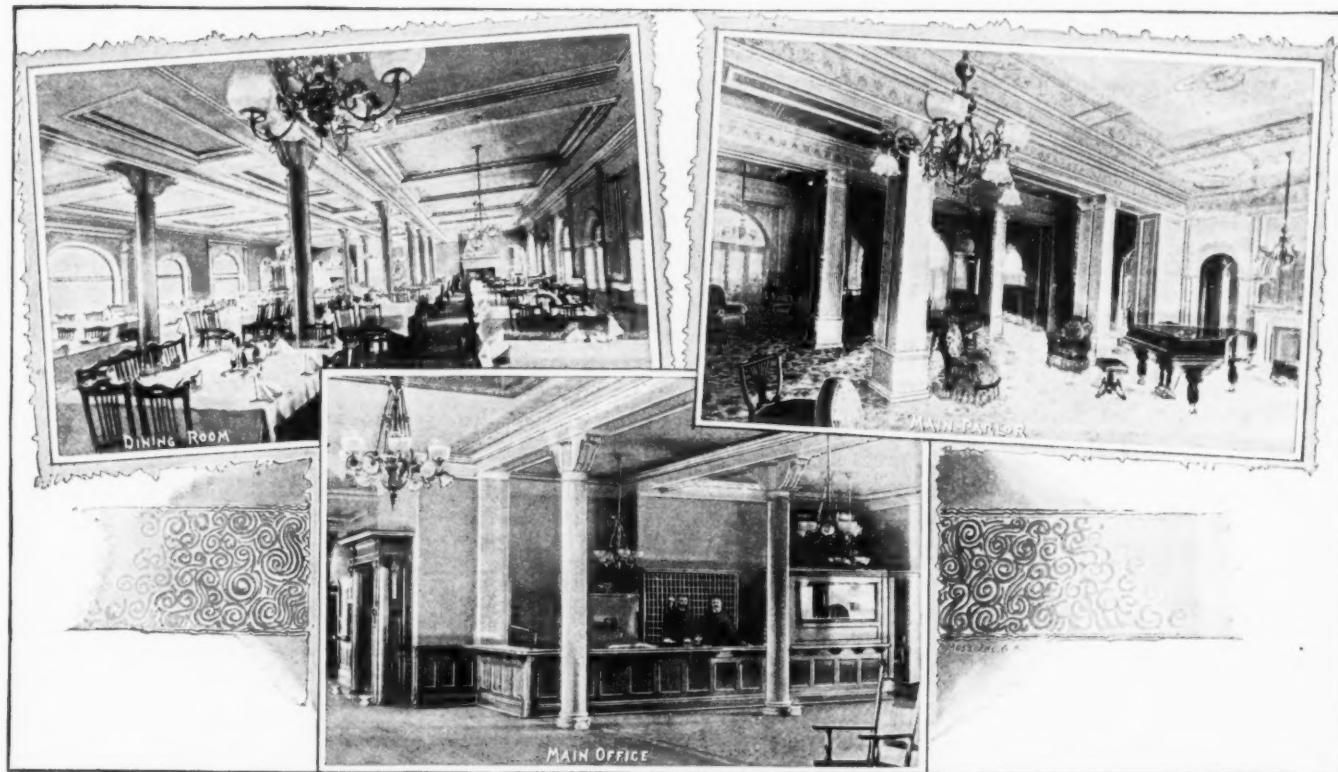
his own country. It is the neutral ground upon which climates of all the zones meet in friendly contest to show what they can do for the benefit of man. It is no wonder that this area is comparatively limited in extent, else other sections would be deserted for its kindly limits. The warm rays of the sun that ripen the spongy fruits of tropical and sub-tropical belts draw from its fertile soil the luscious products of the warmest countries; the tempered heat and cool breezes cover the fields with the golden grain which is the pride and the subsistence of the inhabitants of the so-called temperate districts; Nature in ages past has covered the mountains with a cloak of green through which the hoary peaks have oftentimes shrugged their shoulders, and timber for stately structures or vessels to plough the furrows of commerce through the blue field of the ocean is to be found on every range; mighty rivers have sifted the soil, irrigated it, and spread it in vast valleys, where, obedient to the efforts of man, it produces food for millions. The possessors of this wonderful country are

each feature points with index finger, and in which is typified the supporting territory. The commercial and social center of these fertile valleys of the Cascade Mountains is Portland, a city as marked in its appearance as is the country itself. It lies along the crescent of the river, nestles upon the sides of the encircling hills and spreads over the tableland on the opposite banks. Its business streets, its wharves, its residences all tell, in a language which any thinker may read, its past, its present and its future. To the traveler from the East whose eyes have been dimmed by the heat radiating from sandy mesas on which the sparse sage brush serves only to emphasize the dreariness and desolation, the valleys leading to Portland seem like the vales of Tempe and the city appears at first sight like some municipality transported intact from New England. Closer investigation shows that this similarity has many exceptions, and, with all fairness, the differences are in favor of this young giant of the Cascades. There is more coloring in the Western city, more of the pictur-

rough fir bring back the imagination and emphasize the fact that here the natural surroundings act as a tonic and a comfort, not as a narcotic. The miles of wharves and warehouses above which tower the slender masts of ocean vessels, the great elevators, the shipyard, the noise of heavy laden trucks, the screeching of switch engines, the rumble of trains all corroborate the same impression.

The site of a city is as susceptible of analysis as is the camp of an army. The battalions of trade may make a temporary bivouac anywhere but when they form a permanent base of supplies they do so for strategic reasons whether consciously or unconsciously acknowledged. Generals have made mistakes and so have pioneers, but Portland is not one of them. Whether its location was an accident or a judgment, its prestige is certain and its future can be read in its surroundings.

Ages ago the elements began to carve out the future location and territory of Portland from the earth itself. Within the arms of the Blue



INTERIOR VIEWS IN "THE PORTLAND."

Mountains was a great sea. As the waters sought an outlet to the greater ocean, they burst through the hemming barrier in a mighty stream, which even to-day is famous for its size—the Columbia. From all the arms of that sea, reaching into what are now magnificent valleys, came other streams which cut through the silted strata of the old sea bed and joined the outlet. Thus by the hand of Nature were the different territories connected, pointing clearly to a com-

mon center. As if the invention of man had been foreseen and provided for, the coming of the railroads did not affect geographical values. Engineers found that erosion had done more for them than thousands of navies could have accomplished in scores of years and they wisely followed the construction forces of ages past. The iron bound track crept through the passes of the mountains along the banks of the river, and the conditions which pointed to Portland as

a commercial center were only doubled in strength, and Nature and science have riveted to the city the wonderfully fertile districts of the mountains by furnishing natural and artificial highways to her marts.

The origin of Portland is in the main prosaic. In the earlier days when vessels depended more upon chance and barter, a venturesome captain turned inquisitively up the broad Columbia to dispose of his goods. The ocean-traveling hull



PORTLAND.—"THE PORTLAND" HOTEL.

found ample welcome in the river which it traversed until it reached its practical level of navigation. Here it reached its great tributary, the Willamette, which it followed until a trading station was begun, the stock being the cargo which had thus been brought nearer the consumer. This point naturally became the center of distribution for the country. Vessels came in greater numbers with each succeeding year. Wagon roads were built to make the post accessible, and steamer lines were established. Trade increased, population multiplied, and additional buildings were erected until the little commercial sapling showed many concentric rings of growth and the trading station had become a city thoroughly metropolitan in character.

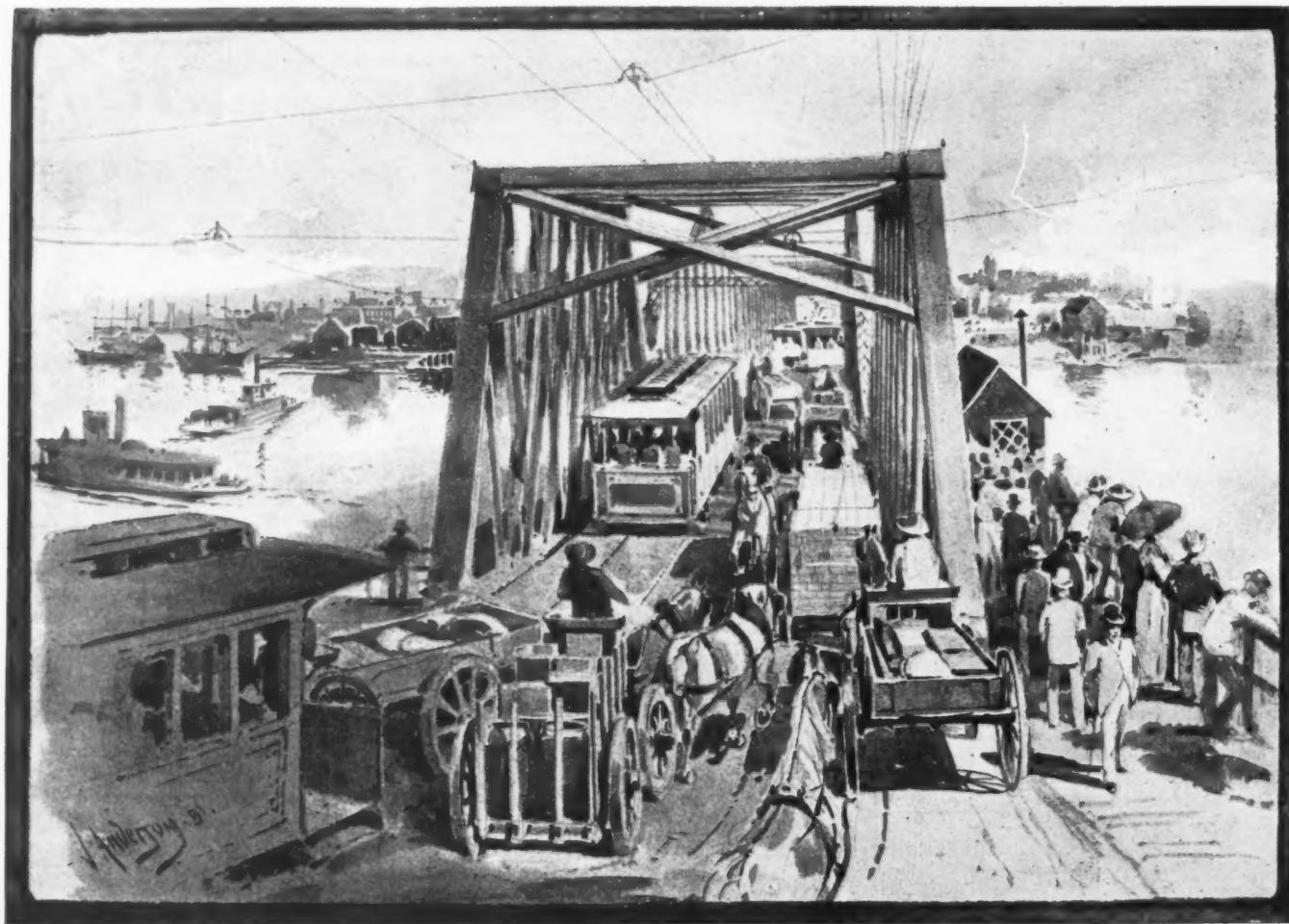
Subsequent events proved the wisdom of a choice of site which is so advantageous it might well be characterized as inspired. The Columbia

sap the strength of the young settlement. A new city was laid out on the Columbia, wharves were built and an attempt was made to force trade to this new rival. Vessels still went by to Portland, the attempt failed and rattling wharves tell the story of impotent jealousy.

In spite of this lesson, another effort was made with far greater prospects of success. It seems a logical inference that a harbor near the ocean with facilities of distribution would seriously impair the trade of a city one hundred miles away from the coast. Conveniences for transhipment were provided at Astoria and the plan involved the unloading of ocean vessels there and their distribution of the cargoes in the interior by other carriers. The accumulated strength of Portland was too great; the city took no retaliating measures, but as the magnet draws bits of steel, so it drew to it as before the iron hulled

fear hereafter. The current of the river has been used to remedy its own work of deposit and there is now a channel over a mile in width and twenty-five feet deep and for three-fourths of this distance the depth is twenty-seven feet. The jetty itself will be four and one-half miles in length when completed.

To show their willingness to do for themselves as much as possible, the citizens of Portland have issued bonds to the amount of \$500,000, the proceeds of which are to be expended in removing some bars in the course of the Columbia and in securing a twenty-five foot channel to Portland. So determined was the purpose, that in order to test the validity of this appropriation for what seems to be an extra municipal object, the appropriation was called in question in the supreme court, and, now that it has the sanction of such high judicial authority, work will be



PORLAND.—MORRISON STREET BRIDGE ACROSS THE WILLAMETTE RIVER.

rushes seaward with a velocity of twelve to fifteen miles an hour, and the heavy stream would nearly sweep vessels from their fastening at wharves along its banks. In spring, too, ice would hurt the refuge and would be a source of infinite trouble to shipping. All such annoyance is avoided by turning into the broad avenue of the Willamette. Here is depth, a gentler flow, and, in times of high water, the river instead of becoming a torrent is transformed into a great lake as far as the falls at Oregon City above Portland. Thus is Portland located on a navigable *cul de sac* connected by a magnificent watery highway with the Pacific.

The strength of this position has been tested several times in the history of the city. In its early days a corporation with a steamer line at its service undertook to establish a new town to

commerce of the country. The vessels spurned the new wharves and going up the river saved the cost of transporting the goods they carried to and from a point nearer the Pacific. So failed the second attempt to injure the ocean borne commerce of Portland, and its prestige and pre-eminence in its territory are now conclusively acknowledged.

The ribbon that binds the prospects together is of course, the silver Columbia, and its condition is jealously watched. Some time ago the neutralizing currents of ocean and river deposited near the latter's mouth a bar which threatened to interfere grievously with the growing commerce. The aid of the national government was invoked and a jetty at Point Adams on the plan of the Eads jetty at the mouth of the Mississippi has already proved that there is nothing to

prosecuted as rapidly as possible. More than that, locks will be constructed around the beautiful cascades of the Columbia and so will the great wheat fields of the interior have a water communication with Portland which, if it has no other result, will serve to regulate rates upon the railroads.

In the character of the country surrounding and tributary to Portland and in the closeness of its connection with the city is to be found the secret of its prosperity. Some carper at the wisdom of Divine Providence has remarked that God ought to have set the mountains 200 miles further east. The justice of this criticism is open to great doubt. The rivers of the past have carved out a network of valleys whose floors are covered with the richest possible soil and which interlock in a natural hub at

Portland. The rain laden clouds of the Pacific float easily over the coast mountains, but unable to lift their burdens over the higher wall of the interior range drop them upon the fields below. The fertile kingdom thus provided divides itself naturally into four districts. Nearest to its capital is the district between the Cascade and Coast ranges, which extends from the divide of the Puget Sound Country and the Columbia watershed on the north to the southern boundary of Oregon. In this division are included those wonderfully fertile valleys, the Willamette, Umpqua and Rogue River valleys in Oregon, the lower lands along the Columbia, in Oregon and Washington, for the natural geographical territory of Portland reaches beyond the artificial boundaries of the State. Here are at least 12,000 square miles of land suited for farming and fruit culture, an empire great enough in itself to support one city. The character of the northern portion of this district is rolling and heavily timbered, changing as it approaches the restricting mountains into foothills, while in the river bottoms there are found the richest hay lands in the world. From Portland itself the Willamette Valley, a garden spot of the Pacific Northwest, sweeps away to the southward for a distance of 120 miles. From mountain slope to mountain slope it is fifty miles in width, making one beautiful valley, broken rarely by projecting spurs of foot-hills which are tillable to their very tops.

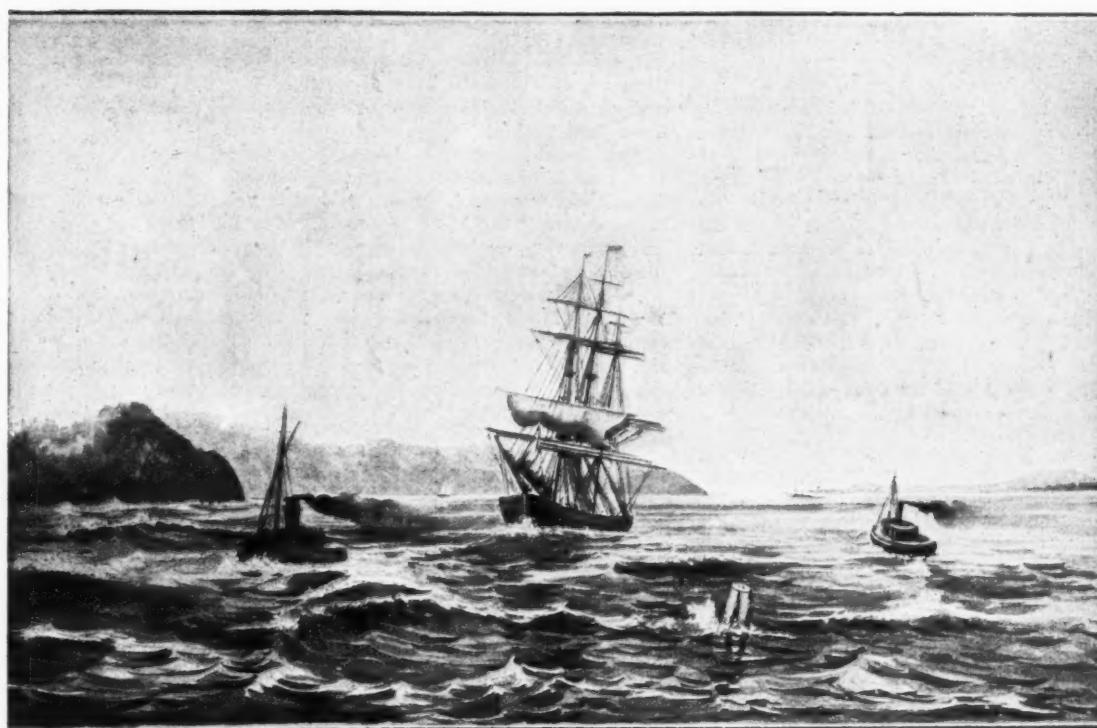
This valley, with its 4,000,000 acres of the finest agricultural land in the world, is watered by the Willamette River, which furnishes a highway for its products leading to Portland's door, and a dozen tributary rivers with their contributing streams. In the complete inventory of the valley's resources the item of nearly 2,000,000 acres of foot-hill land, which is fully as productive as the bottom land, must not be forgotten. Timber is most beautifully distributed. The mountain spurs are covered with forests so that wood is within convenient distance of every farm. The soil is a rich black or gray loam whose productivity seems inexhaustible. In many places it had

been cultivated for forty years without showing a diminution of fertility and fruits, and cereals flourish in tropical profusion. This immense garden, which is famous throughout the West, would in itself support a metropolis; but, as if to provide resources immeasurable, it is flanked by others equally as prolific.

South of the Willamette is the Umpqua Valley, watered by the Umpqua River, which breaks through the Coast Range and finds an independent outlet to the Pacific. While this valley contains little, if any, prairie land, it has many tracts which undulate along the river bottom similar in character to that of the Willamette.

It contains 1,700 square miles of agricultural land, free from timber save to a degree desired by the farmer, and the soil varies from the rich sandy loam of the bottom lands to the dark loam of the higher ground and the easily worked clay of the hills. It is similar in character to the Willamette Valley, and, here as there, the higher lands are unusually well suited for fruits and grains, while the well watered lowlands do equally well for grasses.

At the southern part of the Umpqua Valley a range of hills, like a connecting link, stretches from the coast to the Cascade ranges, dividing it from the Rogue River Valley, which reaches east and west, seems like a great base on which rest the other two as they point away northward. This famous valley is walled in on the south by the high and rugged Siskiyou Mountains which stand like sentinels at the north boundary of California. In fact these three valleys are practically one, owing its division namely, to the three rivers which make them bloom like



MOUTH OF THE COLUMBIA RIVER.



WILLAMETTE FALLS, OREGON.

gardens. Within this gigantic bowl, protected by mountains which allow the clouds to hover over their guarded fields are 1,200 square miles of arable land broken here and there by mountain lines which at times seem to limit its extent. With the exception of some low and comparatively flat lands along the river and its feeders, the soil is about the same as in the valleys already described, while the mountain slopes offer timber enough for all the purposes of the settler. The spectator who has from the summit of the Siskiyous looked down upon this gigantic bowl, whose floor is patched with all the colors of gold, green and brown, rising to the great edges of mountainous ranges on whose distant sides heavy forests appear soft as velvet, will never forget his sudden realization of the scale on which the Creator has fashioned the earth and the limitless terraces here provided for the cultivator.

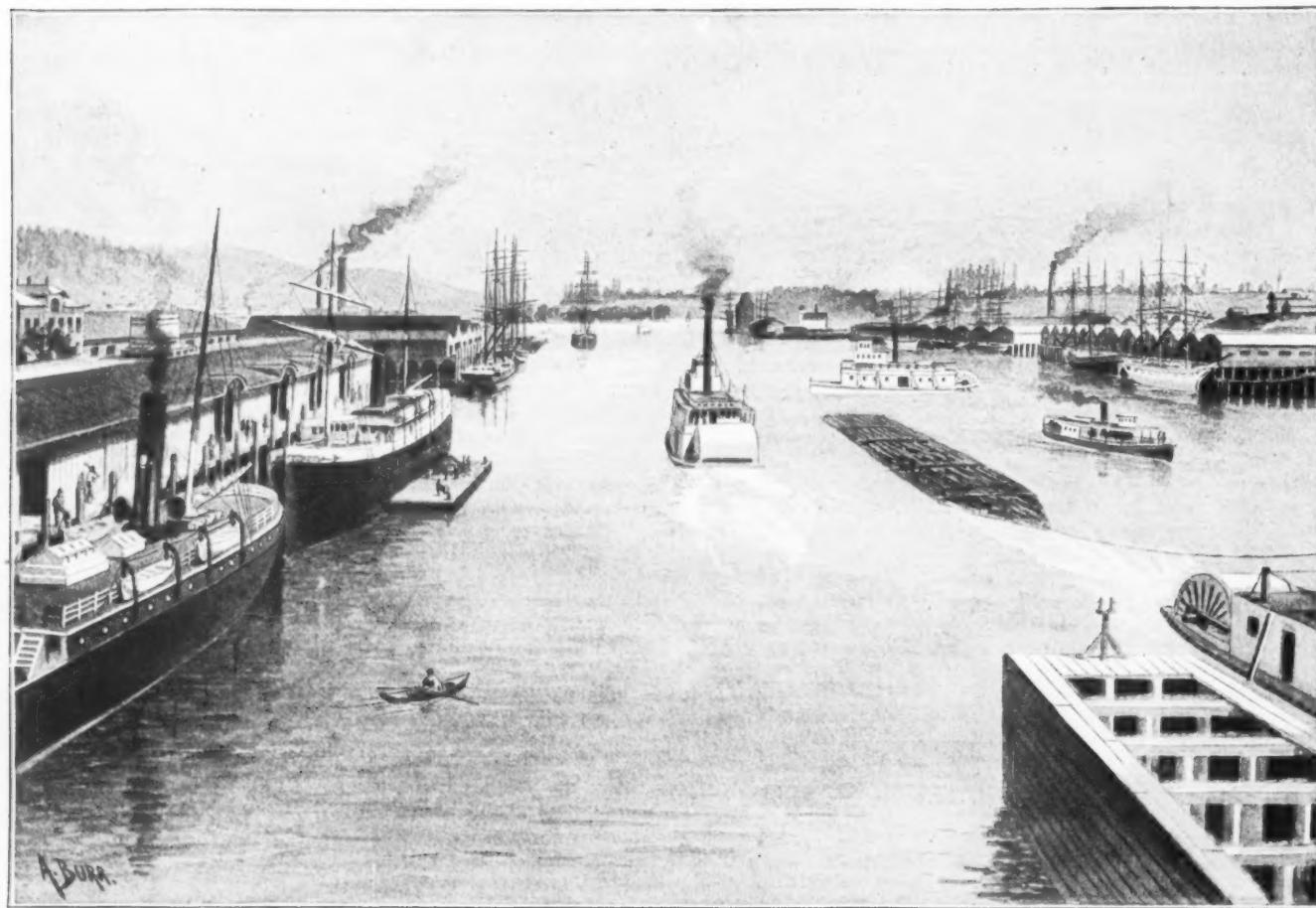
with careful tillage be raised to thirty-five or fifty.

As if this was not a generous enough allotment of territory to flank a city, the mountains turn to Portland the tribute of other districts. First there are 13,000 square miles of territory generally free from timber and denominated "Bunch Grass lands" which are watered by the John Day and Deschutes rivers. Here crops grow the next year after settlement on lands previously uncultivated. Fruits and grains do equally well in the gray soil, and the Columbia River is an easy roadway to the Portland market. This fertile district is as yet open to the settler.

In Northeastern Oregon and Southeastern Washington is another tributary section which, comprising the fertile plains of the Walla Walla and Umatilla districts and the Grand Ronde and other Blue Mountain valleys, contains 10,000 square miles of arable land. The season here is

can be done in every month of the year and in the severer seasons outdoor work is stopped for only a month or six weeks. In the winter of 1887 flowers were blooming and plows running on New Year's day, and this was the severest season in twenty years. With this glance at the surrounding country, it is easy to understand the city of Portland, at once its leader and its offspring.

The city of Portland naturally shows the direct and reflex influences of its situation. The entrepot for the surrounding country, trading ships and steamers fill the wharves with manufactured products to be distributed among the settlers; the depot for transhipment of the products of plains, valleys and hillsides, the vessels are there loaded with food stuffs for their return voyage. In addition to the navigable rivers which, penetrating nearly every valley, offer



PORLAND WATER FRONT—VIEW LOOKING NORTH FROM THE STEEL BRIDGE.

This triune valley is the richest strip of agricultural land in the world, with the possible exception of Sicily. It produces all the cereals in the finest quality, save corn alone; which, owing to the coolness of the nights, does not reach its greatest perfection. It is the home of flax which here grows wild, and when cultivated makes the finest fiber in the world, and fruits, save those whose origin is in the tropics, grow in abundance and perfection. A few acres stocked with slips become a productive fortune in a few years, and with the exception of the slightest attention bear a crop which requires very little care. This new section, in common with others which are newly settled, is not completely taken nor is it exhaustively cultivated, as the fertility of the soil makes this an unnecessary effort of economy, though experience has shown that the average yield of twenty-three bushels of wheat to an acre can

from a month to six weeks earlier in the spring and later in the fall than in the northern states of the Atlantic seaboard and farm work is prevented for only six weeks in winter. The surplus products are marketed at Portland, which is also the base of supplies, and the Columbia and Snake rivers with the railroad systems furnish it unequalled transportation facilities.

Separated from this district by the Snake River, but still almost the continuation of this body of land, is the famous Palouse Country with its wheat fields, the quality and extent of whose crops are used for comparison. This celebrated district draws its supplies from Portland and finds a market for its products in the adjacent Coeur d'Alene mining country. In these districts, comprising 40,000 square miles of arable lands, the city of Portland finds its strength and becomes for them both an entrepot and depot of supplies. In average seasons plowing and sowing

natural means of transportation, there are the railroads, which ever following the erosive lines offer a competition to the water route. Before other cities had sprung up in the Pacific Northwest, Portland had attained a commanding position of commercial supremacy and the great transcontinental lines were obliged, as a matter of safety to themselves, to make it an objective point. As a result, the city is bound by steel lines to the rest of the country, and these long fingers lay heavy grasp upon its desires. The Southern Pacific stretches away south and eastward, connecting with San Francisco by a line that creeps cautiously about the base of Shasta and reaches on to the plantations of Louisiana. The Union Pacific shoots southeastward toward Chicago and attaches the Garden City to the capital of the Pacific Northwest. The Northern Pacific reaches eastward and unites the great centers of St. Paul and Minneapolis with these

fertile valleys, a bond doubly strengthened by the Great Northern and the Canadian Pacific roads, which run through scenes which make the Alps and their valleys insignificant in comparison. The hand of commerce in which Portland rests reaches well nigh over the entire country with these steel digits and the result is apparent in the city itself.

The casual visitor would be impressed with the subdued energy of the city. Along the wharves is many a trim built vessel. The steel doors in the hull are open and men and trucks are busily engaged in storing the consignments from Europe, Asia or America in the capacious warehouses. Windlasses are rattling as they lift heavy bales from the depths of the hulls and allow them to slide down a chute to the wharves below. Out on the stream are tug boats steaming rapidly along against the current, and over at the elevators are vessels loading with cereals for foreign consumers. Up on First Street heavy trucks whose floors barely escape the street are rolling heavily over the pavement, and on the sidewalks are piles and piles of boxes and sacks which exhale the subtle odors always associated with the trade of a seaport town. There is a sense of repressed power, a confidence in acquired strength, a belief in the future and the uselessness of nervous hurry apparent everywhere. In the stores on First and Second streets

are found stocks which would astonish a New York or Chicago merchant, embracing not only the staple articles but the foibles that spring from fashion which the local merchant carries that there may be no charge of incompleteness.

Statistics are dry; at least such is the modifying adjective usually connected with them, but in the light of the facts, they bloom with unwonted meaning. The year 1890 was not a bright year. The entire country felt the shadow of its events and feels them now, so that it is hardly just to any city to use it as a criterion. Yet it is the most recent to give up results, and by these the city of Portland can be dispassionately measured. It was for the State of Oregon an unusually bad year, for there was little rain; but a more than average crop attested the reliability of soil and climate. The value of the jobbing trade for 1890 was \$131,550,000. In 1889 it was \$115,000,000, so that the margin of increase represents \$16,550,000, a sum which many an older and more populous city might boast. Jobbing always precedes manufacturing in the new country, but Portland evidently will become the producing center for its territory, a prospect evidenced by the balance sheet. The government census returns credited the city with a manufacturing output last year of \$30,000,000. With a modesty as surprising as it is exceptional, the business men declare that \$27,385,000 is nearer the truth.

The voluntarily reduced item shows a gain of \$7,202,000 over 1889. In achieving this result a capital of \$15,841,500 and 10,217 employees were used, while in 1889 the capital was \$12,803,500, and the hands 7,862. This increase in the jobbing and manufacturing lines naturally affected the financial houses, and the year of 1890 saw three new banking establishments organized with a capital of \$700,000, and other banks increase their capital \$3,360,000, giving a total of \$12,129,652, not including surplus and undivided profits to lubricate the cogs of trade. The clearing-house index



PORTLAND.—TRINITY EPISCOPAL CHURCH.

also rose in one year from a weekly average of exchanges of \$1,477,144 to \$1,800,463, adding its testimony to prosperity.

The effect of one of these items can be traced through many others; their combined effect has results in people and building. In 1890 there were added to the city 2,123 buildings at a cost of \$3,296,000, and the close of the year saw the plans of structures to cost \$1,120,000 on the architects' tables. As the city grew means of rapid communication were necessary, and cable, electric and steam motor lines reached out into every quarter and bound the various districts into a compact municipality. During the past year

\$1,160,000 was expended upon the seventy-five miles of road already constructed. The residents have not been inoculated with the speculative fever, for the deeds registered show about the same number and amount; an inference proved to be correct by the individuality in the homes erected. All incidental items show a relative increase. The postoffice receipts increased from \$182,325 to \$202,941; the payments increased in even ratio. The money order business expanded from \$2,531,480 to \$2,769,416 and the mail matter delivered went up from 5,191,805 to 6,700,234 pieces. Public improvements included sixteen miles of side-walk, four of cross-walks, five and one-half of macadam, seven of grading and six of sewers.

One immense item in the business of Portland is the ocean trade, whose extent is compactly shown by the tonnage record, which for last year includes inward bound 409,213 tons, outward bound 415,804 tons or a total of 825,017. If the tonnage of other river ports is added the value of the Columbia as a waterway is expressed by 1,468,000 tons. In only one direction did the year 1889 show a decrease, and that was in the exports which amounted to \$16,197,804 for 1889 and \$12,020,470 for 1890. This, however, is easily explained. The short crop of 1889 left a very small amount for export during the early months of 1890 and the supply of tonnage was very small during

the latter part of the year. As it was the wheat exported in 1890 was 2,502,156 centals with a value of \$3,130,010 against 2,202,464 centals for 1889 with a value of \$2,853,403, while for the same years the export of flour amounted to 522,765 barrels with a value of \$1,915,308 and 625,507 barrels worth \$2,463,335.

The rapid strides of the city are most easily and exactly measured by statistics. In three years the jobbing trade jumped \$65,000,000; in the same time the manufacturing output rose \$15,000,000 and the number of employes increased 5,000. When the families interested in this improvement are considered the increase in real estate transfers from 1,546 to 5,721 is easily and normally explained and the reason is apparent for public improvements showing an increase of \$3,000,000.

There are some who, in the face of these magnificent results, dare characterize the citizens as being too slow and conservative. True there appears to be a slight absence of the dash so often conspicuous in the American people, but the sterling qualities possessed more than balance any fancied defect. A short time ago a party of gentlemen gathered by the accidents of travel in the smoking room of a palace car, were chatting about the country and its people. Some of the younger members of the party were rather severe in their criticisms upon what they termed, in blunt phraseology, "the mossbacks." When at last they paused in their strictures, an old gentleman gently inquired if their reflections were at an end, and being informed that they were, continued: "In the pioneer days a party of 300 emigrants after weeks and weeks of traveling exposed to the privations of the deserts and attacks by the Indians arrived in the Grand Ronde Valley destitute and almost starving. Here we were 300 miles from Portland, our destination, almost exhausted. What do you think we found there? a wagon train loaded with provisions sent out by the citizens of that city to meet just such needy individuals as ourselves and to assist us.



PORTLAND—GRACE METHODIST CHURCH.



PORTLAND LIBRARY BUILDING.

How is that for 'mossbacks?' Rehabilitated and encouraged we pressed on until we reached that city and went into camp near where the Union Depot now stands. We had just settled ourselves well when a deputation of townspeople came down and the spokesman gravely informed us that we couldn't stay there—it wasn't allowed by the city—and we couldn't—those people divided us up, took us to their own homes and treated us as honored guests until we scattered to the various valleys to begin life anew. How is that for mossbacks?"

The party was silent, for the moral was pointed and its efficacy is apparent to-day. Men who, undaunted, fight their way across a continent to build homes and cities, are not likely to let any

serviceable material escape their project and they deserve more credit than Stanley who penetrated the wilderness surrounded by a small army. They have built a triune city of 70,000 people, which includes East Portland, where the residence district of the future will be on the gently rolling foothills; Albina, with its rapidly growing elevator and warehouse business and its handsomely located residence section, and Portland itself, where commerce first took its stand on account of the steep banks. Business blocks creditable to any city adorn the business portion and others are being erected at a rate evincing a remarkable growth. An opera house has been built which is worthy any metropolitan dramatic representation; and a hotel which has few peers

and no superiors in the East surprises all visitors. The newspapers are as complete and as bright and trenchant as those of Eastern cities although their expenses are necessarily greater. The business men pull together for the common weal and the Chamber of Commerce and Board of Immigration are factors of progress—not names of anaemic corporations. Electric lights supplied from dynamos at the falls at Oregon City twelve miles away, electric cars, cable cars which glide up twenty-one per cent grades for 1,700 feet with an ease and safety astounding to the spectator, public parks—all are provided, and the description of Portland means simply the description of a modern municipality with the exception of unique features caused by local conditions. The coming generation has not been forgotten in the demands of the present. A high school which is one of the most ornate structures on the coast is the head of a system which begins in the primary department and ends at the college. The higher institutions are at hand. St. Helen's Hall is the educational

home of 200 young ladies; Bishop Scott's Military School is the training place for 250 boys. To make the system complete, the Portland University, endowed with three-quarters of a million, is now organized and the buildings are being built as rapidly as possible. When President Stratton and his faculty begin work there will be in the city limits a complete system of education from the kindergarten to the professional school.

There is no visible flaw in the charter of Portland's future. The commerce will grow as the surrounding country is settled and newcomers will be plentiful where farms soon bring a competence in fruit or cereals. It now throws its all-acquiring net over thousands of square



PORTLAND HIGH SCHOOL.



PORTLAND.—THE BETH ISRAEL SYNAGOGUE.



miles, from the bays along the coast to the trans-mountain country, and the meshes will grow closer and stronger with each year. The importation of manufactured articles will decrease for the city will manufacture for its own district. The means are near at hand. Water power is near, iron is to be found and is now being used at Oswego, and plentiful beds of coal are not far distant. Timber, hard and soft, is everywhere, and the shipyards of the Pacific may well be located on the Willamette where this summer the handsome "Victorian" glided from her stays into the stream.

The limits of East Portland will be gradually usurped by majestic business blocks whose splendor is seen in the structures now building; property will rise legitimately, for this district is limited by the encircling hills and Portland is already compact, its density of settlement being noticed when compared with other cities; Denver, for instance, having 114,000 inhabitants to 100 square miles, while Portland has 75,000 inhabitants to only twenty-six square miles, the ratio in the old district being 10,000 to a square mile. The residences will be driven back to the hill-sides or move across to the east shore and crown the low hills which flank the business line lying along the river united to the west bank by ferries and bridges. Thus the amphitheater in which Portland lies will become a vast industrial center upon which the homes will look down from the surrounding hills.

Nor is pleasure and recreation lacking in this almost ideal city. There is the broad Columbia and its cascades, the Multnomah Falls, the Bridal Veil, and the Latonville Falls, which in a day unlocks the splendor of the Cascade Mountains. There is Astoria with its canneries where salmon are dipped from the water and prepared for market in a period measured by minutes. There is the seashore, distant only a short ride, where the surf breaks over the finest beaches in the northwest. Within the city's limits a few minutes will take the visitor to Portland Heights, whence a panorama of mountain, valley and river is to be seen never to be forgotten. Yonder is Mt. Hood holding his snowy shield up to scorn the sun and at the left St. Helen's is wrapped in

her shining mantle of white, while Adams and Rainier are seen in the distance. A city park is held in the rugged beauty of mountain gorges and within its compass of acres may be found the roughness of Nature, her pretty dells or the embellishments of art. There is a ride to River View on an electric line which climbs the hill-sides, runs beneath the shadow of odoriferous pines, crosses trestles beneath which are seen the tops of trees and runs near the ledge that overlooks the scene below. The view well rivals the ride. The river and its white craft, the wharves and their vessels, visit us from afar, the railroad trains which move like visions, the distant mountains whose dark green is capped with white and gold act like an anæsthetic to cares and troubles, and with his hand almost on the rapid pulse of business, man is ab-

sorbed in contemplating the handiwork of Nature.

Equally restful is a stroll along the residence streets. When plants are dry and withered in other climes rose succeeds rose in this country with a luxuriant growth and coloring that brings despair to the envious floriculturist of the East. Fuchsias grow like trees and hold their vividly colored clusters aloft in triumph; pansies are massed in battalions of yellow, black and purple, and giant hydrangeas throw their blue blossoms up from clusters of green.

The air is filled with perfume. Thus do the Orient and Occident clasp hands, each offering its treasures. Thus is the spirit of enterprise refreshed by that nameless balm which soothes the senses, which nearest resembles the sought-for elixir, and which is found only in the "land of the lotos."



PORTLAND.—RESIDENCE OF R. B. KNAPP.



For the past ten or twelve years Portland has been noted for the magnitude of the expositions which

her citizens have presented for the entertainment and instruction of the people of the Pacific Northwest. The arrangements for the Exposition of 1891 are on a scale far exceeding those of any former year. Great as has been the success in the past, there is every indication that the present Exposition will surpass any yet held within the confines of that enterprising city. The recent consolidation of East Portland and Albina with the city of Portland seems to have brought new elements into her affairs, and these are most discernible in the preparations now about completed for the Exposition which will open September 17th.

The building owned by the Exposition company is the largest on the Pacific coast devoted to exposition purposes. It covers six and one-half acres admirably arranged for the purpose intended and contains the largest and finest music hall west of Chicago. In the rear of the building there are ample grounds for the Stock Annex where, during the holding of the Exposition, blooded stock—everything from the noble stallion down to the timid rabbit is displayed. Large premiums are annually awarded, and the opportunity offered by the Exposition is largely availed of by stock fanciers throughout the Pacific Northwest. The Exposition building has a frontage of 400 feet on one of the principal thoroughfares of the City, and extends back a distance of 220 feet, giving a floor space in the main floors and galleries of nearly 200,000 square feet. In addition to music hall, it contains a mammoth art gallery, judiciously arranged for the most advantageous display of paintings and sculpture. Two wings on either side of music hall are devoted to exhibits—the east wing containing the general exhibits, and the west wing, the agricultural, horticultural and machinery exhibits. In these two halls are displayed each year the various examples of industry, agriculture, horticulture, and manufacture, to which have been added attractive features in the way of music and art from different parts of the world.

The building is brilliantly lighted by over 100

Thomson-Houston arc lights, and by nearly 1,000 Edison incandescent lights.

This year the musical attraction will consist of the great Xapadores Band of Mexico, regarded by those who have heard it perform as the finest band on the American Continent. It is composed of fifty-four members under the leadership of the veteran director, Miguel Rios Toledo, a composer of great celebrity and a leader without a peer.

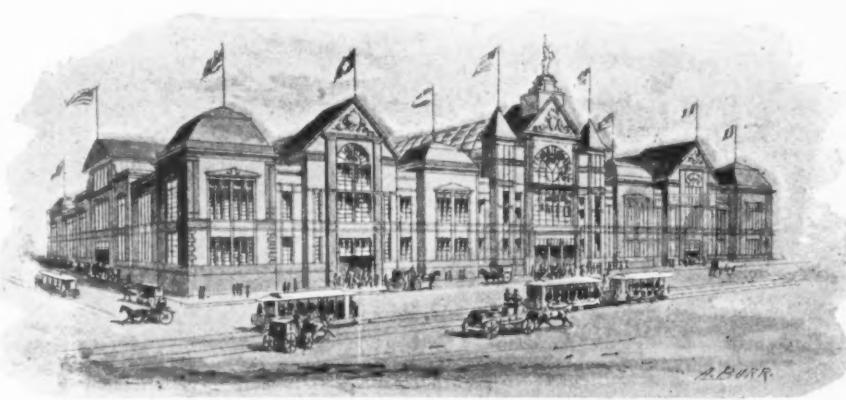
The art gallery will embrace nearly 100 famous pictures from masters in the art. These were secured through the agency of Charles F. Haseltine, well known as the head of the Haseltine Art Galleries of Philadelphia. Some of the pictures to be exhibited are of great value; one being by Munkacsy for which \$50,000 has been refused. Among the pictures which have been admitted are four examples of the great American painters, George Boughton and George Inness.

Among the attractive features for the present year will be an immense electrical exhibit given under the auspices of the Thomson-Houston Electric Company. This will include the remarkable process of welding by electricity, to which will be added many novelties in electrical science which heretofore have been unknown to the people of the Pacific coast.

The other special features for the Exposition

extremes of the United States' possessions in one building.

Special days at the Portland Industrial Exposition have from the beginning been a source of great interest and instruction. The entire run of the Exposition—thirty days—is with the exception of Sundays, devoted to some particular specialty, one of the most unique being Wedding Day, on which two or more couple are united in marriage with all the sacredness that should surround the ceremony. The merchants and manufacturers vie with each other in giving costly presents to the bride, and the capacity of the building on this day is fully tested by an immense concourse of people. Another popular day is Railroad Day, when a vast number of railroad men attend the Exposition. Owing to the fact that Portland is the terminus of three transcontinental railway lines, this day is one of the great days of the Exposition. Civic Day is another notable day, embraced by the different civic societies and secret orders, which attend, where allowable, in full regalia; each order having a booth decorated in an emblematic fashion and made the headquarters of the body which it represents. Days are set aside for the important surrounding cities and country, and great numbers of people make the pilgrimage to Portland for the purpose of attending the Ex-



PORLAND INDUSTRIAL EXPOSITION BUILDING.

of 1891 are numerous and interesting. They include the presence of a delegation of Umatilla Indians who, in full war costume, will execute war dances, and the now well known, if not celebrated, ghost dances. This, we believe is the first occasion on which the government has allowed Indians to participate in an exposition in the manner described.

To thoroughly appreciate the range of the special features, it need only be said that alligators from Florida, totem poles and remarkable curios in the way of carvings from Alaska, will be shown visitors thus, bringing the two

position on these days. Pioneer Day at the Exposition is one of great interest. The early settlement of Oregon, antedating the 49er of California, suggests that the State contains a large number of pioneers. For this reason, Pioneer Day at the Portland Exposition is made an occasion of great interest to all participants. Barbecue Day, Military Day, Baby Day, and other occasions set apart, keep a live interest in the Exposition from the opening to the close and have contributed, together with the excellent management displayed, to the great success of the Exposition.

Among the Board of Directors are some of the foremost men of Portland recognized for enterprise and progressiveness. The directors are Geo. H. Williams, Ex-Attorney General U. S., of Williams & Wood, Attorneys; Geo. H. Durham, Attorney; F. A. E. Starr, of Killen, Starr & Thomas, Attorneys; D. S. Tuthill, Secretary Columbia River Paper Company; W. J. Hill, Principal Bishop Scott Academy; D. F. Sherman, Cashier Oregon National Bank; Chas. E. Ladd, Secretary Portland Flouring Mills; E. A. King, President King Real Estate Association; Frank McDermott, U. S. Inspector of Boilers; R. B. Knapp, President Knapp, Burrell & Company,

Company, and Vice-President Oregon National Bank; E. G. Hughes, Attorney; T. M. Richardson, Capitalist; A. H. Johnson, Packer; Van B. DeLashmutt, Ex-Mayor of Portland, President Oregon National Bank. The president is Thomas M. Richardson, a gentleman who has, by perseverance and industry, raised himself to a position of great wealth and influence. He stands high in the community, and as president of the Exposition has shown abilities of a high order.

The secretary and superintendent, having in his charge details of the Exposition, is Col. R. W. Mitchell. For several years he was the

chief clerk of the Land Department of the Northern Pacific Railroad Company. At present he is the land agent for Lazard Freres of Paris; Adjutant General of the State of Oregon; Secretary and Superintendent of the Exposition, and represents in Oregon the Department of Publicity and Promotion for the World's Columbian Exposition. In addition to discharging the duties of these various offices he is well known as a writer over the name of "Rabelais."

The Executive Committee consists of T. M. Richardson, E. A. King, G. E. Withington, D. S. Tuthill and F. A. E. Starr, young men of acknowledged energy and ability.



PORLAND.—VIEW ON FRONT STREET.

Wholesale Farm Machinery, Wagons, etc., President U. C. & B. Transfer Company; L. G. Pfunder, Florist; Wm. Kapus, Secretary Oregon Furniture Manufacturing Company; E. J. Jeffery, Of Bays & Jeffery, Portland Consolidated Brick Company; Frank Dekum, President Portland Savings Bank, Vice-President Commercial National Bank, and President, Columbia Fire & Marine Insurance Company; C. H. Lewis, Of Allen & Lewis, Wholesale Grocers; E. W. Allen, Seedsman; C. H. Woodard, of Woodard, Clark & Co., Wholesale Druggists; H. L. Pittock, Manager Oregonian Publishing Company; E. C. Jorgensen, Wholesale Liquors and Cigars; Donald Macleay, President United States National Bank; R. P. Earhart, U. S. Collector of Customs, and Secretary, N. W. Fire and Marine Insurance Company; G. E. Withington, Cashier First National Bank; G. B. Markle, President N. W. Loan and Trust



THE SKIDMORE FOUNTAIN.

PORTLAND PARAGRAPHS.

Chas. H. Dodd & Co.

It is always a genuine pleasure to prepare an article for the readers of THE NORTHWEST MAGAZINE, setting forth the progress made by an enterprising, deserving Northwestern mercantile house. Much might be written of the agricultural implement house of Chas H. Dodd & Co., that would be interesting and instructive to both Eastern and Western readers. In a more extended article it could be shown how sagacity and energy combined in about the proper quantities to build up one of the greatest concerns in the northwest corner of Uncle Sam's domain. The house was established at Portland in 1866, and in the following year a branch was located at Walla Walla. Since then, the firm's interests have gradually extended until they now have no less than eight branch houses, located respectively at Walla Walla, Pullman, Colfax, Seattle, Spokane Falls and Ellensburg, Wash., and Albany and Athena, Oregon. The Portland house handles the local retail trade and the jobbing trade of all that portion of Eastern Oregon and Washington that is tributary to Portland, and part of the Snake River region in Idaho. A picture of the Dodd block is given herewith, which shows an elegant, substantial structure, in keeping with the importance and extent of the firm's business interests.

Messrs. Dodd & Co., in addition to their stock of farm machinery, carry an extensive line of hardware and steel, steam implements, dairy machinery, saw mills, shingle mills, road grading and excavating machinery, rubber and leather belting and machine specialties of every description. They have a building with three and a half floors, 50x100 feet in size, and a warehouse, opposite the depot on North Fifth Street, for wagons, threshers and binders, 100x200. The Spokane Falls establishment is a three-story brick and stone structure, 100x176 feet in size, from which the Potlatch, Spokane and Palouse valleys are supplied. It is unquestionably the largest concern of the kind in that section.

A Timely Publication.

While the financial centers of the Old World, and most of those of this country, have seriously felt the effects of the monetary depression which has prevailed for something like a year past, it is refreshing as well as astonishing to notice that there is one city, with its tributary section, which does not seem to be even slightly affected by the stringency complained of elsewhere. This is the consolidated city of Portland, Oregon, which is admittedly the strongest, financially, of any city of her size on this or any other continent. Various causes contribute to this most gratifying condition of affairs in Port-

land. The best and altogether most lucid statement of the reason for this remarkable prosperity is to be found in an interesting, brief little pamphlet just issued by one of the most prominent financial and brokerage houses in the Oregon metropolis, and which is attracting the serious attention of capitalists and investors everywhere. It is full of terse statements, broad and yet conservative, expressed in vigorous English, and should be read to be appreciated, as we have not space to quote from it freely, as we should like to do. The publishers rank very high all along the Pacific Coast as men of experience, enterprise

business experience so well that in two years his firm has become one of the best known and strongest financially in the Pacific Northwest.

A Great Machinery and Vehicle House.

The wonderful agricultural, timber and other natural resources of the Northwest have made necessary a great business house, where all classes needing machinery or vehicles of any description could properly supply their wants without the necessity of sending East. There has grown up with the country the great firm of Staver & Walker, who have devoted the past ten

years to supplying the needs of the people of the Northwest in the line of machinery and vehicles, and whose facilities are unsurpassed, to-day, by any other firm in the United States. Their principal office is in the New Market Block, Portland, Oregon, where they have displayed the largest, most varied and complete line of machinery handled by any one firm in the country, while they have branch houses at Seattle, Spokane and other principal cities in the Northwest, and a thorough system of agencies and representatives covering the Pacific Coast. All visitors to the Northwest, or those intending to locate here, will find it generally to their advantage to call on or correspond with Staver & Walker relative to any requirements they may have in the line of farm machinery, implements, engines, boilers, saw mills, shingle mills, machinery of any description, farm and spring wagons, express and delivery wagons, buggies, carriages, or "anything on wheels." Their large general catalogue and price-list is one of the handsomest books of the kind published in the United States, and will be mailed free to all parties writing for the same.

The splendid facilities possessed by Staver & Walker, combined with their large and complete stock, enables them to give the best possible attention to all wants in the lines they handle, and to guarantee satisfaction to their customers.

A Brief Eulogy.

Special attention is called to the card of Jas. McI. Wood in another column of this number. Mr. Wood is a man of more than ordinary ability. He combines in his make-up the elements of enterprise, and

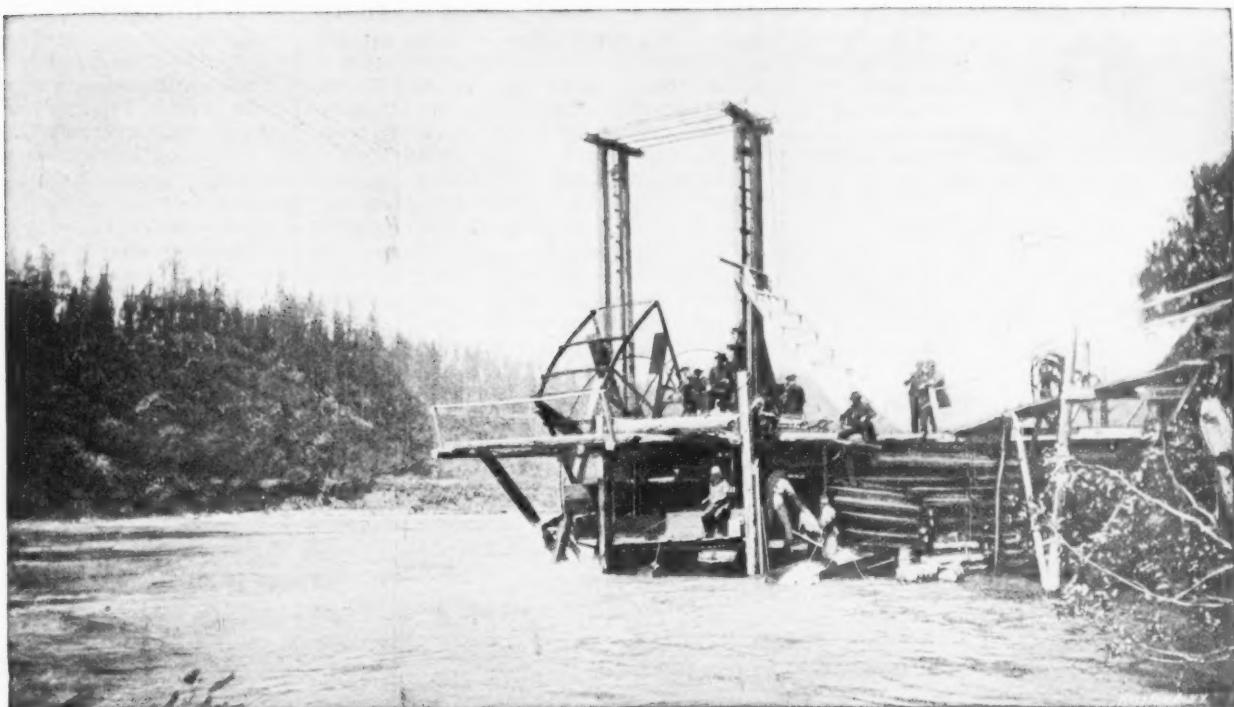
conservative business methods. Although a resident of Portland for less than a half dozen years, yet he has, by his sound business methods, within a comparatively short time, attracted the attention of the residents and business men of Portland, and he now enjoys their confidence to an extent equal to that of any other man engaged in realties in the metropolis of the Pacific Northwest. His conservative training in financial matters in Baltimore, Md., together with his assurance and alacrity have resulted in placing him in the front rank of reliable real estate men of the Pacific Northwest.



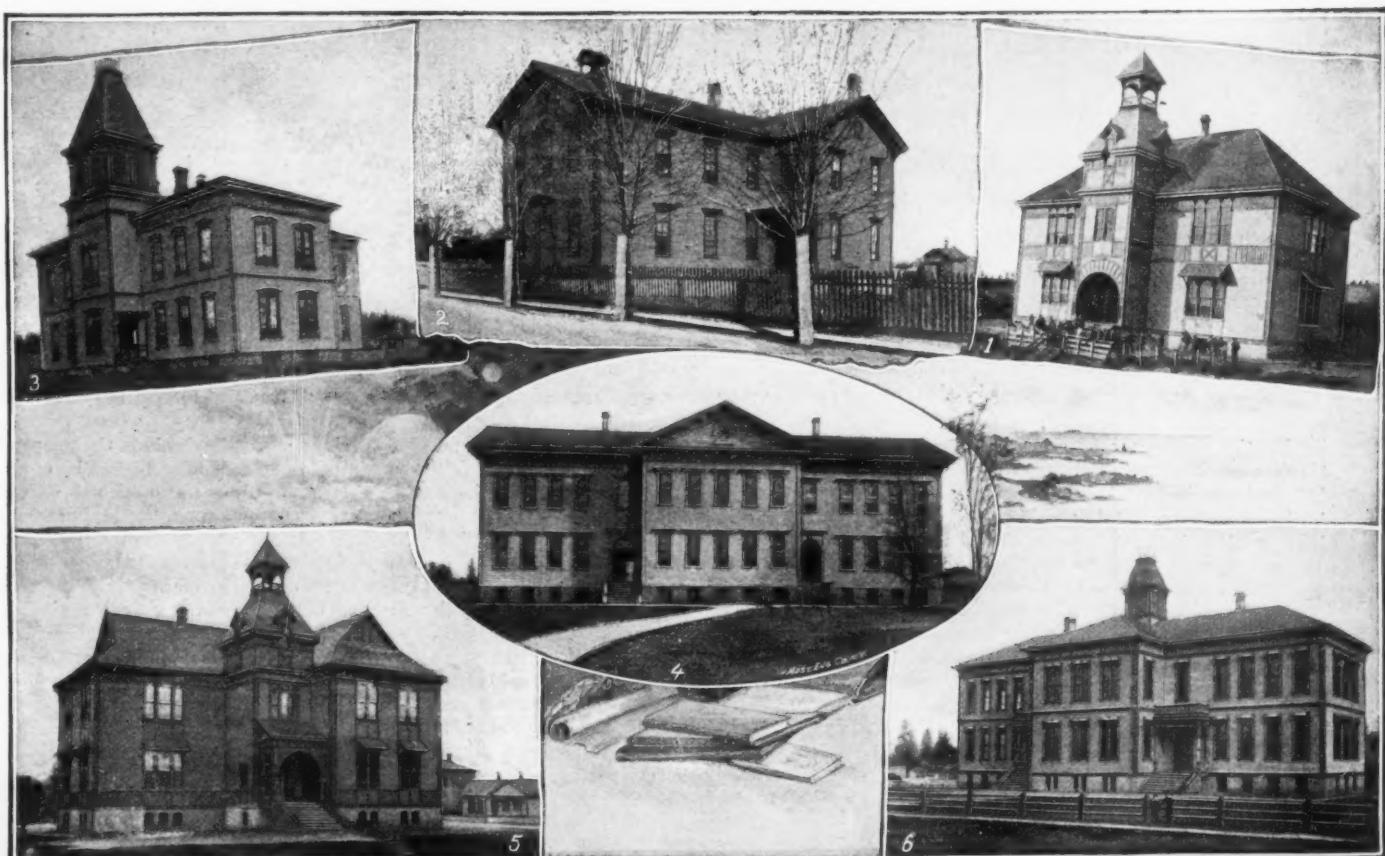
PORTLAND.—THE PORTLAND FLOURING MILLS.



PORTLAND.—THE DODD BLOCK.



A FISH WHEEL ON THE COLUMBIA.



PUBLIC SCHOOL BUILDINGS OF PORTLAND.

QUESTIONS OF THE DAY.

Civilization and Suicide.

Besides imitation there are other social influences which lead to suicide; but the most powerful is that which we denote by the general term civilization. Self-killing is emphatically the crime of intellectual peoples. Almost unknown to savages, rare among Mohammedans, it rages among the nations most advanced in culture and refinement with a fierceness exactly proportional to their mental development. It is said that Rome knew nothing of the curse till after the establishment of the empire. It was when the Roman legions had carried their eagles triumphantly through the world, and brought back the means of luxury in the spoils of Europe, Asia, and Africa, that life in the Eternal City began to be "weary, stale, flat and unprofitable."

tion; to stimulate the demands for the comforts of life which the mass of toilers cannot attain. As society advances new wants arise; the luxury of to-day becomes a necessary of life to-morrow; and every want, though essential to man's improvement and perfection, involves new victims to madness and suicide. In the effort to grasp the conveniences and luxuries of our complex modern life, he cannot move without collision, without meeting stubborn obstacles and limits. The interests of other men enclose and press round him like a circle of iron; and if he is weak-bodied or weak-minded, if he is handicapped by bad habits, and cannot adapt himself to new ideas, he will succumb, and perish in the struggle. To those who recognize the fact that all the phenomena of social life, all the progressive phases of civilization, originate in the constant struggle of man with nature, with other men, and with himself, suicide will appear what it

trial organizations, our fiery ambition and emotional temperament, our dry electric atmosphere, all impel us to overwork. Traveling by steam at thirty miles an hour is but faintly typical of the headlong hurry, the hot, panting haste, with which we pursue both business and pleasure. In the fierce competitions of professional and business life—the strife for wealth, office and honors—the wear and tear of brain are enormous. It is well known to machinists that no evolution of force can take place with excessive rapidity without damaging the machine in which it occurs. Express-railway stock wears out far more rapidly than that used for slower traffic; and man's nervous system is subject to the same law—that duration of action is inversely proportional to its intensity.

The struggle between civilized men for the world's goods is becoming more and more a struggle of intellectual strength, ingenuity, and



VIEW OF PORTLAND, OREGON, LOOKING EAST FROM THE HEIGHTS, SHOWING THE BUSINESS CENTER OF THE CITY.

To-day the Germans, who are the profoundest thinkers and the most cultivated people, are also the most suicidal race, in Europe. France comes next, England third, Italy and Hungary fourth; while, on the other hand, Spain, the most backward of European nations in culture, Ireland, Portugal, Corsica, and Dalmatia rank the lowest in the suicidal scale. Of the different regions of the same country, the north and northeast of France outrank in culture and in suicide the centre and the southwest; the north and centre of Italy outrank the south and the islands; and Saxony, which in its schools and general culture surpasses the rest of Germany, surpasses it also in the number of its suicides. In short, so universally does the rule hold that the strength of the tendency to self-killing may almost be regarded as an index to a people's civilization.

One of the inevitable effects of cultivation is to make men dissatisfied with poverty and depriva-

actually is—not an enigma, an inexplicable social phenomenon, but one inevitable in the process of civilization. Only as it has been said, "in an ideal condition of the future, where man's sphere of action shall have made itself independent of nature, and where all his forces shall have attained the summit of perfection, will the struggle cease to have victims; but until that supreme end has been attained the weary and perhaps everlasting path will still be inundated with the tears and the blood of mankind."

One of the most distinctive characteristics of our civilization, and at the same time one of the most fruitful causes of voluntary death, is the fast living, the hurry, excitement, and competition, of our nineteenth-century life. We live in an age of intense activity; the click of the electric telegraph, the whistle of the locomotive, and the whir of machinery are ever in our ears. The rapid development of our country, its vast indus-

skill; and as the brain is the weapon with which the fight is made, it breaks down under the strain to which its forces are unequal. Nature protects the strong, the skilful, the subtle; but she leaves the ill-formed, the anomalous, the poor in force and skill, to be crushed in the contest; and thus a continual elimination takes place of inferior organisms from human society. But even the conquerors, the men of iron frames and lignum-vite nerves, often emerge sadly crippled from the struggle which has consumed so much of their physical and psychical force, and suffer from infirmities and an overpowering sense of ennui and life-weariness which hurry them into a suicide's grave. A recent melancholy example of this is the fate of the late Franklin B. Gowen, the eminent Philadelphia lawyer, who died by his own hand, a victim of the same overwork and "carking care" which laid in the grave the composer Weber, who had so often vainly sighed,

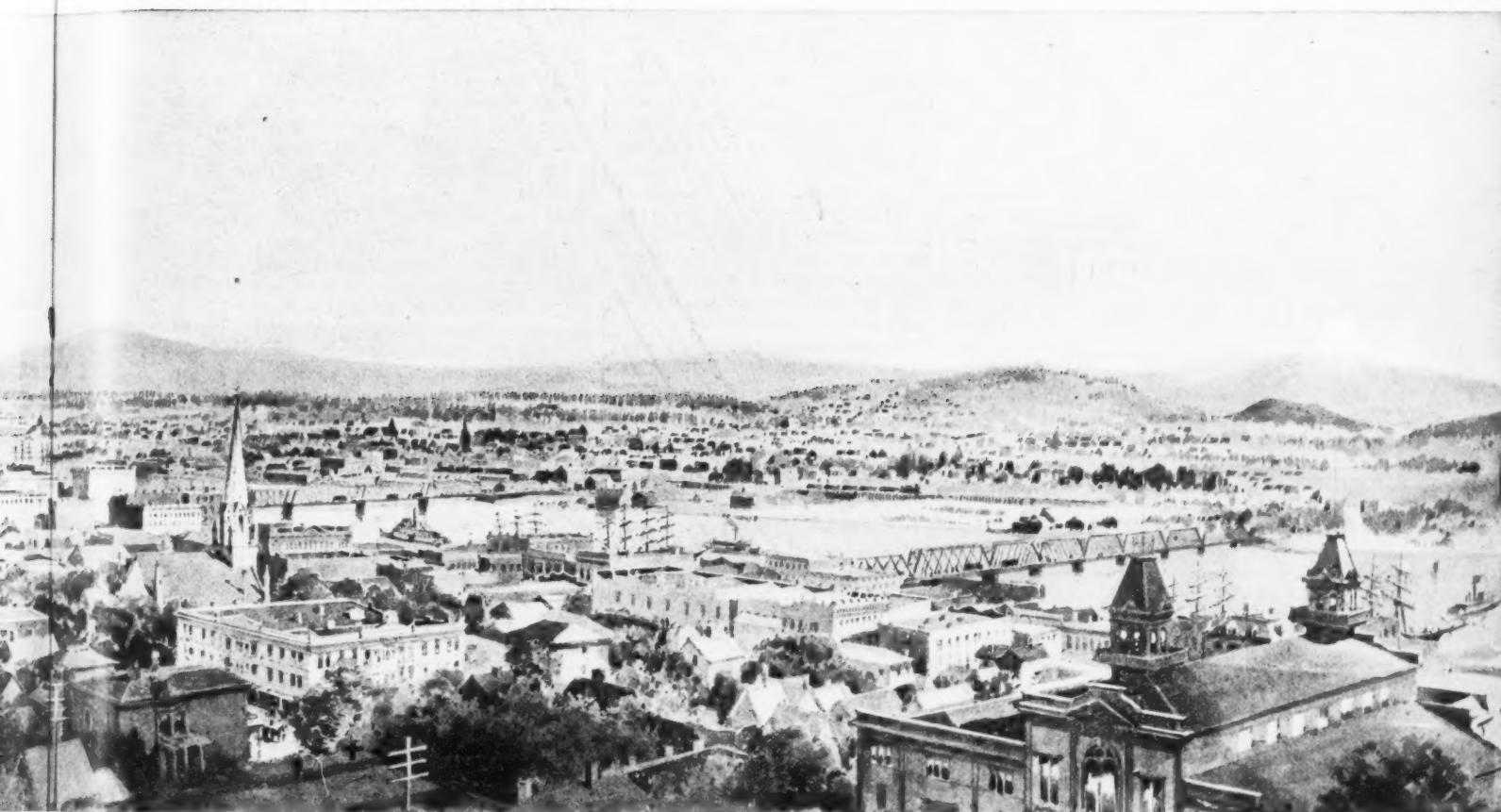
"Would that I were a tailor, for then I should have had a Sunday's holiday!"—drove Hugh Miller to kill himself, crying, "My brain is burning; I can bear life no longer!"—cut short the lives of John Leyden, and Alexander Nicolly at thirty-six, struck down Sir William Hamilton with paralysis in the meridian of his powers, sent a Vice-President of the United States reeling from the Senate chamber, and ended the career of that brilliant journalist, Henry J. Raymond, in a cerebral crash at forty-nine.

Again, the modern means of transit and of conveying intelligence,—the railway, the steamship, the electric telegraph, and the telephone,—enabling us, as they do, to utilize every moment of our lives, are crowding our days with activities, excitements and anxieties which till recently were unknown. Our life to-day is the life, not of our own city or country only, but of the whole world. Events a thousand miles away startle and

mindedness which springs from forced, hothouse education, begun too early and goaded on too fast; and, again, from premature responsibility and the engagement of untrained minds in the toils of life. Boys and girls to-day are often men and women in the experience of life and its excitements, and *ennuyés* or *blasés* at an age when their grandparents were flying kites and dressing dolls. The young man, scorning the old, slow roads to success, and determined to dazzle the world and conquer its honors by a *coup de main*, "consumes in an hour the oil of the lamp which should burn throughout the night," and, ere he reaches the meridian of life, exhibits the haggard face, the sunken eye, and the feeble gait which belong to "weird eld." Who can wonder that under such circumstances life becomes "weary, stale, flat and unprofitable," and that the poor, worn-out victim of ambition and over-work, who has never once rested his brain or

from twenty-five to 100 per cent; and the deeper for increase above 100 per cent.

Yellow squares and splashes pit the country east of the Missouri River, and are jumbled up with encouraging patches of gray. The yellow covers Eastern Maine to a considerable distance back from the seacoast. From Western Maine the yellow overflows the greater part of New Hampshire and considerable sections of Vermont. From Western New York, two irregular bands of yellow, one starting about Oswego and the other just east and south of Rochester, make their way almost to a junction near Binghamton, whence they are continued down into New Jersey. Virginia, from the summit of the Blue Ridge to the ocean, is one splash of yellow. A long, irregular loop of yellow runs down from just south of Akron, Ohio, far into Kentucky, then turning pushes up into Indiana above Richmond. The yellow in Iowa looks like a weaver's pattern,



VIEW OF THE CITY, THE WILLAMETTE RIVER AND THE DISTANT PEAKS OF MOUNT HOOD AND MOUNT ST. HELENS.

thrill us like those at our very doors. Every man actively engaged in the world's business to-day is a microcosm. The world's pulse beats within him, and he is sensitive to its throbings; he burns with its feverishness, and faints with its languor. It is this which constitutes the stress of modern existence, exhausting so rapidly human life, wearing it out with the pains and penalties of a civilization which is as heedless of mortal weakness as the machine that catches its inventor in iron toils and crushes him to atoms.

We pride ourselves on our superiority to our fathers; but while we enjoy more, we also suffer more, from a thousand artificial anxieties and cares. They fatigued only the muscles; we exhaust the finer strength of the nerves; and the result is that loss of stamina, of hopefulness, and of zest for the simple pleasures of life which leads to disgust, life-weariness and finally to destruction. To all this may be added the weak-

"possessed his soul" during his hot pursuit of wealth and fame, should seek to end his days, and with them

*"The heartache, and the thousand natural shocks
That flesh is heir to?"*
—William Mathews, in *North American Review*.

Measure and Decrease of Population.

A notably interesting census bulletin is that presenting graphically the increase and decrease of population in ten years, just issued by Superintendent Porter. The bulletin is a map with brief accompanying letter press. By arrangement of shades and colors it shows where the population has increased since 1880, and where it has fallen out. Yellow is the symbol of decrease; and gray indicates increase. The rate of increase is indicated by the deepening of the shade. The tint stands for an increase of from 0 to twenty-five per cent; the first shade for increase

while from a point below St. Paul it follows the Mississippi down to Dubuque. The yellow checks are more numerous in Iowa than elsewhere west of the Mississippi until we reach far-off Nevada. That State is almost an unbroken expanse of yellow. This yellow spreads from Nevada into a considerable part of Central Eastern California.

Stretching from the Missouri to the Pacific and following a line north of Nevada there is one vast expanse of the darkest shade, that indicates increase above 100 per cent. This dark shade stretches down from Wyoming through Colorado where there are only a few splashes of yellow, through Western Kansas and Western Texas to the Gulf. About the Great Lakes, and especially in the region near Duluth, the increase is accented by the darkest gray. The dark follows manufacturing and the development of mineral wealth in the East and South, commerce, mineral wealth and manufacturing in the Northwest.—*Duluth Herald*.

ITEMS
OF INTEREST.

SCIENCE OF THINGS.—Lord Salisbury, in a recent lecture before the Chemical Society of London, said: "Astronomy is, in a great measure, the science of things as they probably are, geology is the science of things as they probably were, chemistry is the science of things as they are at present." To these adds the *Electrical Engineer*. "electricity is the science of things as they probably will be."

THE MODERN AJAX.—John Whitman, the "Modern Ajax," made a statement that he had succeeded in moving a freight car weighing, with its load, 27,294 pounds, by force of his back and shoulders, with leg force thrown in. A sporting man offered to bet \$1,000 that he could not do it again. Richard K. Fox said he would take the wager on Whitman's behalf and the contract was made. Whitman went to St. John's Park to repeat the task and told the superintendent he was willing to work on any car that could be brought into use, and a car weighing a little over 35,000 pounds was found standing on a curve. Whitman moved the car forty feet. Eight men then tried to move the same car, but could not budge it an inch.

AN ASTRONOMICAL ROCK.—Mr. Meyer, a noted archaeologist, not long since made an interesting discovery near Nicaragua. He says: "About forty-two feet below the surface of an ancient cemetery I discovered a rock which, judging by the figures it contains, has served in remote times for astronomical observations. On this rock I have found two stone tablets, one of which contains a representation of the world, part of Africa and Asia, united Europe, and this continent. A large continent is situated in the Atlantic, which I consider as the mythical lost Atlantis mentioned by some of the ancient writers. The other tablet contains inscriptions of which part are undoubtedly Phoenician."

A QUARRY OF PETRIFIED GRAIN.—An absolute quarry of petrified grain, either wheat or barley, has been unearthed near Talmage, Nemaha County, Neb., and is attracting considerable attention. The kernels of grain are perfect in form but have become as hardened as solid rock and are well matted together. It is with considerable difficulty that one or more of the petrified grains can be separated from the body of a chunk. It is a pretty stone or composition, or whatever it may be called, to look at, and with a few finishing touches would make a very ornamental material to be used on a building. J. H. Thompson, of the Chicago Lumber Co., says that the people in the vicinity of the quarry are using the stone for all sorts of building purposes. Specimens of this discovery will be placed on exhibition at the World's Fair.

THE COLOR CURE.—The color cure for melancholia is said to have been successfully tried in Washington. An eminent statesman who was thus afflicted would at times sit for long hours gazing into space—dreaming, so to speak. His family became very much annoyed and did everything to cheer him up, but without avail. He seemed to grow worse every day. Finally his wife hung rose-colored shades in his library, and then she sewed a piece of rose-colored velvet around the under rim of his hat. His friends

guyed him considerably about it around the halls of Congress, but they knew not what it was intended for. He paid very little attention to their fun, for he had felt the effect of the rose color upon his mind. It was barely two weeks before he was entirely cured, and there in not now a happier dispositioned man in the whole country.—*Boston Journal*.

**

A REVOLUTION IN CARRIAGE LOCOMOTION.—Electrical cabs in Paris and in Stuttgart, and electrical busses in London, says an exchange, are the beginnings of a revolution in the character of carriage locomotion that will emancipate the horse from the servitude of common drudgery and raise him to that of a luxury and pleasure, solely as a means of equestrian exercise. The period when the motive power will be a part of the construction of every vehicle is not so many years away. It is not difficult now to imagine what that carriage of the future may be in some respects.

**

A MAN WHO SHEDS HIS SKIN.—J. H. Price, of Philipsburg, is in town, says the Deer Lodge, Mont., *Silver State*. Mr. Price is the gentleman who, on the 24th of each July, between the hours of three and nine o'clock P. M., sheds his skin—slick and clean. Mr. Price will leave on the 8th of July for San Francisco, where he will remain with several eminent physicians until his annual shedding, when they will sail for Europe to be examined there by the medical fraternity. For his trouble \$2,500 has been deposited with the Hyde Banking Company, of Philipsburg, which will be paid over upon his return. Mr. Price is 37 years old, and in fifteen years has never been sick except three hours each time before shedding, when he is very sick, having spells of vomiting, with very high fever. Physicians say that it is perfectly natural with him, and that there is not another case of this kind on record.

**

WHAT TEARS ARE MADE OF.—The principal element in the composition of a tear, as readily may be supposed, is water. The other elements are salt, soda, phosphate of lime, phosphate of soda, and mucus, each in small proportions. A dried tear seen through a microscope of good, average power, represents a peculiar appearance. The water, after evaporation, leaves behind it the saline ingredients, which amalgamate and form themselves into lengthened cross lines, and look like a number of minute fish bones. The

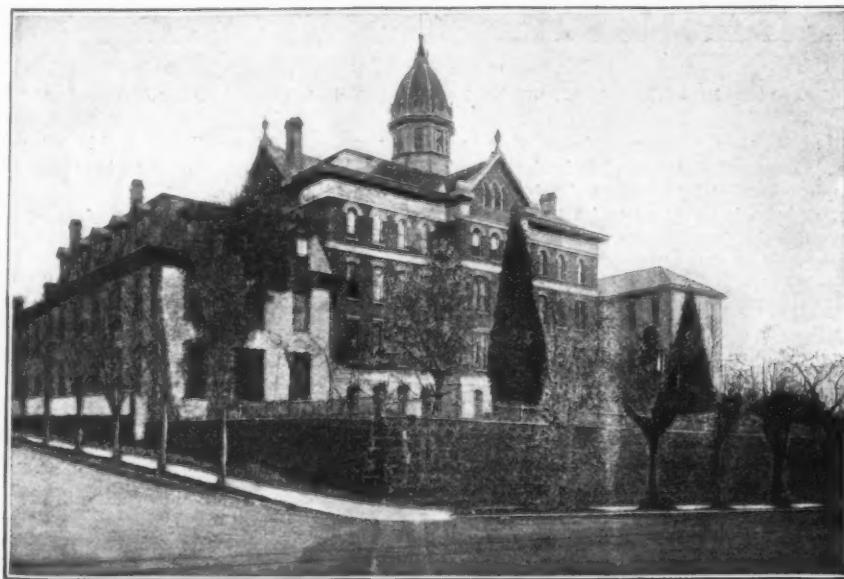
makeup is just the same whether the tears are for joy or grief. The discharge of tears from the lachrymal glands is not occasional and accidental, as is commonly supposed, but continuous. It goes on both day and night—though less abundantly at night—through the "conduits," and spreads equally over the surface of the lids. After serving its purpose the flow is carried away by two little drains, called the "lachrymal points," situated in that corner of each eye nearest the nose, into which they run.

**

PERCENTAGE OF REJECTED MANUSCRIPTS.—The editors of popular newspapers and magazines have many experiences in common, and one of these experiences is the receipt of a large number of articles not available for use. The *Ladies' Home Journal* received, during 1890, 15,205 manuscripts. Of these 2,280 were poems; 1,746 stories and 11,179 miscellaneous articles. Of the poems, sixty-six were accepted; of the stories, only twenty-one, and of the articles, 410, of which latter, however, over three hundred were solicited articles. Thus, it will be seen of the entire 15,000 manuscripts, only 497 were accepted, a trifle over three per cent. Deducting from this the 300 accepted articles written at the editor's solicitation, the net percentage of unsolicited manuscripts accepted is brought down to 197, or a little more than one per cent. Statistics such as these show that far too many persons are trying to find their way into print.

**

HER MAJESTY'S ANNUAL BATH.—Her Majesty the Queen of Madagascar has lately taken her yearly bath, and the act was surrounded with due pomp and ceremony. The official report states: "A solemn procession filed through, bearing the water for the bath, materials for fire to heat it, made directly under the bathtub itself, the towels, soap, perfume and various toilet appurtenances. As soon as the water was sufficiently heated the fire was put out, prayers were said and a hymn sung, imploring that the queen suffer no harm from her daring act, and then as she disappeared behind the curtain a salvo of artillery was fired and the drums beat to announce to the excited multitudes outside that the important part of the ceremony was taking place. At the end of a brief fifteen minutes the queen reappeared, somewhat paler in hue, but gorgeously arrayed and wearing all the crown jewels. In her hand she carried an oxhorn, tipped and bound with silver, full of water taken from the



PORLAND.—ST. MARY'S ACADEMY.

bath just previous to her entrance to it. Bearing this and accompanied by the prime minister she marched to the palace portal, where she dipped a branch into the water and sprinkled the spectators as they passed along.

**

COFFEE KILLS GERMS.—Coffee has disinfectant properties. Only recently a Dr. Luderitz has studied in detail the germ killing action of coffee infusion. Using by no means strong infusions, he showed that a certain harmless micrococcus germ dies in ten per cent. coffee solution in from three to five days. The bacillus of typhoid fever perished in from one to three days under the coffee influence, and the cholera bacillus in from three to four hours. The germ of anthrax or splenic fever died in from two to three hours; but the spores of young forms of the latter germ perished in from two to four weeks only. These latter results speak well for the power of coffee as a germicide, for anthrax germs and spores are by no means easy to scotch or kill. Possibly after these revelations coffee administered internally, may be utilized as a remedy for germ produced diseases. As it is, its virtues as a reviver and "pick-me-up" have long been appreciated outside the medical world.

**

MARRIAGE OF THE FLOWERS.—Plants sometimes employ insects as their servants in the work of reproducing their species, paying them wages in honey. Most vegetables combine the two sexes into one flower; but breeding "in and in" is no more healthful for them than it is for animals. One blossom must marry with another if the species is to be continued in a healthy way. So young Mr. Honeysuckle dresses himself in a spring suit of light yellow and perfumes himself deliciously for the purpose of attracting the gay butterflies around. He also provides a small store of nectar in a golden cup to offer any insect guest that may come his way. Presently a butterfly pauses to take a sip of the sweet liquor, but in doing so she cannot avoid getting some of the pollen on her head, and this she carries to another honeysuckle, where she stops for a second bit of refreshment, and incidentally rubs off some of the pollen upon its stigma. Thus is accomplished the marriage of the flowers.—*Washington Star.*

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BUSY BUFFALO BIRDS IN MANITOBA.—The cow, or buffalo birds, are very interesting and, at the same time, very dishonest little fellows. They would seem to one who is not a close observer, to have no apparent ties to bind them to one particular spot, yet they will return to the same spot year after year. They are too well known to need any description. They are very tame and will follow a plow as closely as possible. Often when a team to which they get attached (for, queer as it may seem, they appear to get friendly with certain horses and cattle) goes away from home, they will go in company with it for a mile or so and then, should the team return in day time, the bird will often meet and return with it. I know these facts may seem hardly true yet I know them to be true, because one little female which had lost two toes of its right foot, followed my plow for three summers in succession. It is very amusing to watch them. When one male alights near another each makes a most deferential bow to the other, each humps up his shoulders, bobs his tail, flaps his wings, "says a few words," wipes his beak on both sides on the ground; then it stretches itself up to its full height and holds its bill straight in the air until one or the other, the inferior one, I presume, moves off to more congenial quarters. The old birds treat their young very badly when they try to join the flock to which they seem to know they belong, the young bird is compelled to keep at the rear of the flock and, presumably, the next generation have to bring up the rear guard the next season.—*D. H. Henman.*



PORTLAND — THE BISHOP SCOTT ACADEMY.

BUSINESS TOPICS.**Ceylon Tea Co.**

If you like good tea you should try ours. We sell only the very finest qualities in Ceylon, Oolong, Japan, Gunpowder, English Breakfast, Hyson, Orange Scented Pekoe and Flowery Pekoe. Our high grade Ceylon is unequalled by any tea sold in this country. Sample package of any one kind mailed on receipt of ten cents. Ceylon Tea Co., direct importers and retailers, Lowry Arcade, St. Paul.

Electric Machinery.

The Elektron Manufacturing Company, of Brooklyn, N. Y., is ably represented in St. Paul by F. I. Renz, whose place is at 95 East Fourth Street. This company manufactures the Perret Elastic Motors and Dynamos, pronounced by experts among the most perfect made, their special qualifications being high efficiency, full power and low speed, and supplied with laminated field magnets. Mr. Renz repairs electric apparatus of every description, having every facility for doing such work.

Michigan Bolt and Nut Works.

These works are located at Detroit, Michigan, and occupy an advantageous position near the river front where they own ample dock facilities, and are on the line of the Belt Railway that gives connection with all the railroads leading from Detroit. They make a specialty of heavy work, such as screw bolts and drift bolts for railroad construction, rods for Howe truss bridges, truss rods, anchors, etc., for buildings, and steel and iron rivets that are formed in solid dies, which insures uniformity in diameter and length. The location of these works at Detroit is such that at least during lake navigation they are able to place their products in the Northwestern market more advantageously than any house in the country. They practically control the Northwestern market. The daily output in 1890 averaged three car-loads per day.

Of Interest to Adult Males.

It may not be known generally that Joseph T. Schusler is one of the heaviest importers of men's suitings in the Northwest, but such, nevertheless, is the fact. His goods come direct through the St. Paul custom house, and he is consequently able to offer his customers fashionable suits at twenty-five per cent less than they are ordinarily sold for. Twenty-five per cent is a big saving on a suit of clothes that costs from \$40 to \$50, and the man of modest income who

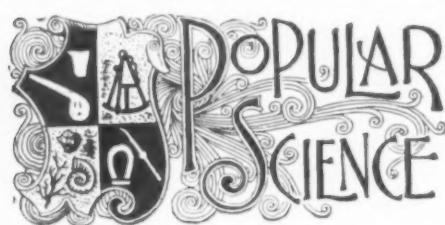
wishes to dress well cannot fail to appreciate it. Mr. Schusler's tailoring and furnishing establishment is conveniently located at 313-315 Jackson Street, where a large importation of fall suitings, including all the newest patterns, has just been received and placed on display. One of the most skillful cutters of the Twin Cities is constantly employed, and Mr. Schusler can and does guarantee entire satisfaction in cut, make-up and trimming of every garment that goes out of his store. Prices this year range from \$25 up for suits and \$5 up for pants. Out-of-town patronage is particularly solicited.

Superior Bottled Beer.

Our method of bottling beer is the only and the best way for the simple reason that the beer goes direct from the cask to the bottle. Our brewery is the only one in the United States that conveys the beer direct from the storage cellars through an underground pipe line to the bottling department, where it is bottled without once being exposed to the open air and its impurities. It is thus kept at the same low temperature of the storage cellars all the time. This great innovation enables the Pabst Brewing Company, the largest brewery in the world, to furnish the public bottled beer for table or family use which contains as much natural life as a glass drawn from a freshly tapped barrel. Our bottled beers are sold over the civilized world, with agents in all leading cities. Annual sales of bottled beer, twenty million bottles. See advertisement of Pabst Brewing Co., Milwaukee, Wis., U. S. A., on page forty-six of this issue of THE NORTHWEST MAGAZINE.

New Water Wheel Pamphlet.

This new pamphlet is published by James Leffel & Co., Springfield, O., hydraulic and mechanical engineers, and makers of the celebrated James Leffel water wheel. It is elegantly printed, on finely finished paper, is handsomely illustrated throughout, and contains a large amount of useful and practical material to those improving water power. A great number of plans for placing wheels are shown, both upon upright and horizontal shafts. Entirely new tablets of the wheels are published, containing new features never before presented by any water wheel maker. This firm has been making the James Leffel water wheel for thirty years continuously, and its business is conducted by the same parties and managers that have been with it since its early history. They make 110 different sizes and styles, and have shops, tools and patterns designed exclusively for this business, and are turning out more and better work to-day than at any time heretofore. The new pamphlet will be sent free to any one applying to the above address.



Utilizing Mosquitoes.

An electric apparatus supplies a strong light which attracts the insects and moths. A suction fan worked by an electric current draws them in when they approach the light, and carries them into a small mill, also worked by an electric current, where they are ground up and mixed with flour, and thus converted into poultry food of excellent quality. This is said to be a Bavarian contrivance.—*Scientific American*.

A Handy Measure.

An ingenious device for measuring distances, and which will be likely to interest architects and builders, is an invention of an English firm. It consists of a small revolving wheel which operates a spindle, the revolutions being accurately registered by a dial counter. By running the distance wheel along a wall or other surface the recorder will show how many feet have been measured. There is practically no limit to the distance that may be determined by this little device.

How to Determine Death.

The French Academy of Sciences ten or fifteen years ago offered a prize of £1,600 for the discovery of some means by which even the inexperienced might at once determine whether in a given case death had ensued or not. A physician obtained the prize for having discovered the following well-known phenomenon: If the hand of the suspected dead person is held towards a candle or other artificial light with the fingers extended and one touching the other, and one looks through the spaces between the fingers towards the light, there appears a scarlet red colour where the fingers touch each other, due to the blood still circulating, it showing itself through the tissues which have not yet congested. When life is entirely extinct the phenomenon of scarlet space between the fingers at once ceases. The most extensive and thorough trials established the truth of this observation.

An Electrical Discovery.

To the gathering of electricians recently met in Columbia College, New York, there fell a singular piece of good fortune. It was their privilege to listen to Mr. Nicola Tesla, as he described for their benefit the greatest forward stride made in electrical science since the invention of the dynamo. For three hours the inventor held his deeply interested audience, and European scientists are already clamoring for fuller details than the cable has given them. It is only four or five years since the young electrician came to this country from the Austro-Hungarian frontier, and began to attract attention by discoveries that dealt with the use of alternating currents for motive power.

His latest triumph is the outcome of careful research and patient study. Following the lines of Crookes, Lodge and Hertz, he has completely surpassed them in his grasp of the electromagnetic theory of light. In his hand the alternating current has become susceptible of vastly increased development. When Tesla began his investigations, the current could be made to alternate from 100 to 200 times a second. Increased vibration he argued, would mean increased results. His first machine leapt to

20,000 vibrations a second, and the results fully justified his theory. A second series of experiments gave him 35,000 vibrations a second, and at last with an apparatus, that is as simple as it is ingenious, he obtained a current with a rate of vibration amounting to millions in a single second.

The discovery means an entire revolution in our present methods of lighting. All wires in direct connection with lamps may be done away with. If it is desired to light a room, it will simply be necessary hereafter to bring the wires from the central station into connection with two large sheets of metal, one on each side. Or metallic wall paper will serve the purpose equally well. Through the induction thus produced, Tesla's discovery will light up properly exhausted glass tubes, which can then be moved with all the facility of an oil lamp. Who invented the carbon filament is at present a matter before the courts. Tesla's invention promises to make the litigation a severely unprofitable one, and emphasizes the often repeated statement that electrical science is still in its infancy. What it may yet accomplish for us, might, if written down in sober prose, seem worthy of the imagination of the author of the Arabian Nights. They who live longest will see most.—*Helena Independent*.

Enormous Force of Hydraulic Streams

The enormous force of a stream of water forced from a hydraulic nozzle, under from 200 to 300 feet or more of pressure, as sometimes used in hydraulic mining in this State, is something almost beyond belief. The quantity of water passing through these nozzles in a single day of mining is immense. A stream of 400 feet vertical pressure delivers a blow of upwards of 500,000 foot pounds—equivalent to about 1,000-horse power.

Louis Glass, who for sixteen years was superintendent of one of the large mines in this State, states that he has seen an eight-inch stream, under 311 feet of vertical pressure, move in a sluggish way a two-ton boulder at a distance of twenty feet from the nozzle, and that the same stream, striking a rock of 500 pounds, would throw it as a man would throw a twenty-pound weight. "No man that ever lived," adds Mr. Glass, "could strike a bar through one of these streams within twenty feet of discharge, and a human being struck by such a stream would be pounded into a shapeless mass." Mr. Augustus J. Bowie, of this city, the author of a standard book on hydraulic mining, says it would be absolutely impossible to cut such a stream with an ax, or to make an impression on it with any other instrument. Mr. Bowie adds, that although never to his knowledge has a man been struck by such a stream as it comes from the pipe, several accidents have occurred where miners were killed by very much smaller streams at distances of 150 or 200 feet from the nozzle.

Prof. Christy says he has often tried to drive a crowbar into such a stream, and it felt as solid as a bar of iron, and, although he could feel the point of the crowbar enter the water for perhaps half an inch, the bar was thrown forward with such force that it was almost impossible to retain it in the grasp. An ax swung by the most powerful man alive could not penetrate the stream; yet it might be cut by the finger of a child, if the child were seated on a railway train moving parallel with the stream in the same direction and with the same velocity. That velocity would be considerably more than a mile a minute.

The statements presented in the above summary will not astonish engineering experts; the average citizen, however, is accustomed to regard water as the least destructive liquid that can be put in motion, and he is familiar with no stronger manifestation of its power than the

velvety touch of a stream from the city faucet. It might occur to a military man that such a powerful agent might be made a most terrible military agent for offense or defense, at short range, if it could only be brought to bear, as indeed it might be by a powerful steam engine in a beleaguered fort or on board a battleship with an enemy close alongside.—*Mining and Scientific Press*.

The Starfish.

The attack of a starfish upon an oyster may be likened to an assault by organized conspirators, inasmuch as each of these five-fingered animals is composed of five distinct individuals," said a scientist to a writer, and he added: "Each of the starfish's five arms has its own mind, nervous system and thoughts, such as they are, and all five nerve systems simply meet in the centre where the arms are joined. Thus it may be said that the mental guidance of this complex creature and the management of its affairs are intrusted to a board of five members, who have communication with each other, but act without the intercession of a presiding officer. Now, is it not wonderful that such a quintet should be able to manage its affairs so well and with such agreement of purpose in everything? Supposing that each of the five individuals attempted to go where it listed, without giving any heed to the others, the animal could not reach a choice bit of food, espied from afar with the eye of one of its members, nor travel in any direction with a purpose in view. But as a matter of fact proved by observation, when a starfish is spying after its food it lifts the ends of its five arms so that the eye beneath each extremity may get a view of things in the neighborhood, and if any object worth going after is discovered, all the many hundreds of sucker-like feet beneath the five arms are seen to push out together in the direction of the morsel desired. There is a unity of intention among the partners that implies unmistakably a conscious sharing of aim and design. The same thing is shown by the way many starfish have of letting themselves drop from steep rocks and cliffs, in order to save the trouble of laborious climbing down. In such cases, before they relinquish their hold and drop, they let go with three or four arms, holding fast until the last moment with the remaining one or two, as if it were to calculate the leap. My observations on this subject have inclined me to think that matters of concerted action with starfish have not infrequently to be effected by first obtaining the assent of an individual ray that is willing. It is known that these creatures sometimes divide themselves voluntarily into a three-armed and a two-armed portion, which may be regarded as the violent dissolution of business, and domestic relations once happy but grown inharmonious. A starfish will often cast off one of its arms and leave it behind, perhaps because the member is not found agreeable to live with. If a rubber band or string is fastened around an arm of one of these animals, and it cannot push the annoyance off with its other arms, the starfish will throw the troublesome arm away, not desiring to retain the companionship of such a cripple. Starfish are like human beings in many ways. Then the animal which has thus deprived itself of a ray grows a new one in place of the old. As for the arm that is dropped, it promptly proceeds to grow four new arms, thus becoming a whole starfish itself. Being the biggest, it is presumably for a long time the boss of the five, which must be gratifying. A few years ago people who caught starfish in the oyster beds destroyed them, as they thought, by cutting them in halves and throwing them overboard but the process was not very effective, inasmuch as every one thus treated promptly became two."

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The Latest Consumption Cure

Since August last ten cases of consumption have been submitted to the treatment of Dr. Germain-See, consisting in shutting the patient up for two or more hours daily in a hermetically closed metallic chamber, into which is slowly admitted a current of compressed air saturated with the vapor of creosote and eucalyptol. Return of appetite, gain of weight and strength, fall of temperature to the normal, and diminution of cough are among the results obtained. Even advanced cases were relieved and some actually cured.

The Model Husband.

An Eastern paper offered a prize for the best description of the right sort of man to marry and the winner, Miss Lillian Perry, of Covington, Tenn., struck off her ideal thus:

"If I wished to marry, which of course I do not, I would desire a man too noble to commit a mean act, but generous enough to forgive one. A man as gentle as a woman, as manly as a man; one who does not talk scandal nor tell disagreeable truths. A man whose name I would be proud to bear, to whom I could carry my doubts and perplexities and with whom I would find sympathy and joy."

This is a pretty hard bill to fill, Lillian. Now if you can pass the examination as well as your young man, it will be a strong pair to draw to,—*Seattle Telegraph*.

The Beard as a Preventive of Throat Diseases.

There is no question as to the efficacy of the beard as a preventive of throat affections. Medical authorities say that diseases of the throat which arise from chills occur almost exclusively among men who shave off their beards. It stands to reason that men would never have been given beards if they were not meant to serve some useful purpose; and that purpose is undeniably the protection of the throat and chest. The works of medical writers of the remote past contain no mention whatever of diseases of the throat, a fact which is attributed to the universal custom of wearing beards in those days. Many people aggravate throat complaints by mufflers to keep the throat warm, but in every change of position of the head or face some part of the neck or throat is bare. The covering does not adapt itself to, or follow the movement, hence the cold air rushes in upon that unprotected part and chills it; but the beard follows every motion of the face or head faithfully, and thus is the most perfect muffler that can be devised.

Silk Underwear Not Healthy.

While silk is exceedingly warm, soft and pleasant to the flesh, it is at the same time not the healthiest substance for an undergarment. In proof of this, practical observation has demonstrated that silk stockings will make the toughest and healthiest feet moist, wet and tender, until walking almost becomes a torture. A silk scarf worn around the neck, next to the skin will produce sore throat in nine wearers out of ten. Silk makes the neck hot and moist, and the first stray breath of cool air that strikes the skin feels like a drop of ice water and will produce a cold. Silk seems to have the faculty, as contrasted with wool, of opening the pores and inciting perspiration, and if it will do this with the neck and feet there is every reason to believe that it

will produce equal susceptibility to cold when worn about the chest and limbs. Those who wear silk stockings invariably have tender feet. The rule that applies to the male will apply with equal force to the female.

Simple Method of Curing Obesity.

In a French journal (*Paris Correspondence Jour. Am. Med. Asso.*) is announced the discovery of a means, as simple as it is strange, for curing obesity, which is attributed to a medical officer in the army. Thanks to this means, a colonel who was threatened to be obliged to retire from the army, as he was so heavy that it required two men to lift him into the saddle, became thin in a few weeks, and to such an extent that he had to take means to recover, in a measure, what he had lost. It was to his doctor that he was indebted for becoming a general. The means consisted simply in never eating more than one dish at each meal, no matter what that dish may be, and a person may consume as much as the stomach can bear, and satisfy the appetite without the least reserve. Nevertheless, nothing but the one dish should be taken; no condiments, or soups, or supplementary desserts should be allowed. This system was recommended to a lady who was slightly obese, and who put it into practice with the best results. The lady observed that she suffered no inconvenience whatever from this diet, and the result obtained by the medical officer may be well understood, as she found by her own experience that the partaking of only one dish, whether it be meat, fish or vegetables, brought on a sense of satiety much sooner than if she had partaken of a variety of dishes, whence the effect of relative abstinence.

Keeping Down Population.

In China tens of thousands of recently-born girls among the poorer classes are thrown out to perish, and at Shanghai I saw a tower formerly used to facilitate this infanticide, says Dr. Joseph Simms, who has recently returned from an extended trip of the Flowery Empire. It is practiced in every part of China, but especially in the interior and in the Loess district. As soon as we get many miles from the coast, it is quite usual to see near the joss house, or place of worship, a small stone tower, from ten to thirty feet high, with no door, but a hole in one side, reach-

ing into a pit in the center. The children that parents wish to be rid of are thrown into this hole, and quicklime soon consumes the lifeless little form. It is said that the priests take charge of this cruel work. It has been estimated that every year 200,000 female babies are brutally slaughtered in the empire. One Chinaman, being interrogated about the destruction of his recently-born girl, said: "The wife cry and cry, but kill alee same."

In every large city in China there are asylums for the care of orphans, supported and conducted by foreigners, who yearly save from slaughter tens of thousands of female infants. At Han-Kow, which is 600 miles inland, I visited a Roman Catholic orphanage for children that have thus been cast out to perish. Mother Paula Vismara, the lady superior of this institution, informed me that she received seven that day, and one day thirty were brought in. Of course these had never been consigned to a baby tower. Sometimes they are found wrapped in paper and left at the edge of the river. Sometimes they are buried alive by the father, but while yet living are dug up by some one else and brought to this institution. Several women are employed by the mother superior in looking after the little victims. Upward of 1,000 are received every year. Many of them, of course, die soon after the exposure and neglect they have suffered through being abandoned, and many are boarded out by the institution in the town. Those who accept the charge have to bring the children once a week for inspection, and then, all being right, they receive the pay for maintaining them. This is an Italian charity, and one of the most admirable in China. During the twenty-three years of its existence it has saved the lives of say 25,000 to 40,000 children, of whom a fair proportion have grown to womanhood. It received considerable support from the European residents at Han-Kow, of whom there are about 150.

Those children who remain within the premises of the institution are fed and clothed, and when old enough taught to sew, make lace, knit stockings and do other useful work. They never know where they came from or who their parents were. When they are four years of age their feet are bandaged, according to the custom of all classes in China, to keep them small, as that increases their chance of marriage.



SIZING HER UP.

Miss Gaunt—"I want a quarter of a yard of ribbon elastic."
Sarcastic Clerk—"And will that be sufficient for a pair of garters, Miss?"

BOZEMAN'S MANY ATTRACTIONS.

BY MATT W. ALDERSON.

Bozeman is surrounded by mountains, cut by canyons whose beauty is a delight to the lover of the picturesque and through whose windings roads extend that afford the city's residents or transient guests opportunities for drives rarely equalled. One of the favorites is that to Bridger Canyon, three miles distant, the entire drive being through a pleasant, hilly country and the entrance to the canyon, along the Bridger Creek being especially beautiful. A drive extending through the gorge shows successive attractions with which picnic-ers are familiar and of which they never tire. Near its entrance and not many rods from the kilo of the Bridger Lime Co. is a warm spring near which its owner is talking of building a sanitarium or summer resort.

Rocky Canyon, five miles distant from Bozeman and down which the Northern Pacific passes, is another spot famed for its beauties. Its enclosing mountains are lofty and strikingly picturesque.

The drive to Ferris' Hot Springs is over a level country, but it takes one through waving grain fields, across Middle Creek and across a narrow strip of gravelled region, which during the June days is gay with the delicate bitter root blossoms and later with the gorgeous prickly pear flowers. There are pleasant drives also into Bear Canyon, Limestone Canyon and Middle Creek Canyon, but the canyon which is attracting most attention just now is Bozeman Canyon; for through it leads the old trail and the recently made wagon road to Mystic Lake, which has for years been an objective point with the pleasure seekers of this vicinity on account of the excellent fishing, adjoining lakes and magnificent scenery. The first trip over the road in carriage was made during the first week of August, and since then several parties have made excursions to this beautiful spot in the heart of the mountains. Money has been raised and the road is in excellent condition for light rigs through a ruggedly picturesque region winding along by Bozeman Creek, first on one and then on the other side of sparkling waters in whose clear depths the speckled sport trout, tempting the angler to linger. A mile or two below the lake on the south of the road are lovely falls of a small tributary which enters Bozeman Creek, and nearer the lake a series of pretty cascades in the stream itself. It is expected that next summer a hotel for excursionists will be erected at the lake, which with this added comfort will prove more of an attraction than ever.

The drive out from Bozeman to the west across Middle Creek and the West Gallatin, then in a southerly direction to the canal of the West Gallatin Irrigation Company is a most charming one and gives a beautiful view of the southern part of the valley. As one drives along for miles after leaving the West Gallatin, he beholds to the north and east a panorama of cultivated fields with the thickly wooded bank of the West Gallatin and Middle Creek beyond and farther away the valley lands, foothills and grand old mountains, above whose heads, if the day be pleasant, fleecy clouds float in a blue sky. The scene is a more perfect one than is often seen in Montana, the cultivated fields in the foreground and the absence of wild wastes giving it a soft picturesqueness characteristic of the Connecticut Valley, while the mountains add a lofty grandeur.

Besides these drives mentioned there are many others, both long and short, which lead through pleasant regions, the short drive from the center of the city to Prospect Park Addition located on an eminence in the eastern part of the municipality, giving one a most complete and satisfactory view of the compactly built city and the farms adjoining it.



HEAD-GATE ON W. G. I. CO.'S CANAL, GALLATIN VALLEY, MONT.

No more delightful place can be found in which to spend the summer vacation than the happy Gallatin Valley, enclosed by lofty mountains, beautified by magnificent scenery, abounding in fish and game for the sportsman and hunter, possessing cool, health-laden breezes for the invalid, and all those attractions which the general seekers after pleasure, rest and recreation desire.

In the early settlement of the Gallatin Valley every one sought to locate on the river bottoms, where the soil is a rich black loam and of surpassing fertility, but later years' experience demonstrated that for fall wheat, especially, the high bench lands were superior. Such land on the eastern slope of the valley is now pretty thoroughly occupied, water for irrigation etc. being obtainable there at comparatively slight expense.

The soil of the high bench lands in the western part of the valley is more sandy, water was scarce and the cost of procuring it expensive. Large canals to cover a portion of it were brought out from the West Gallatin River to the ground now owned by the Manhattan Maltting Company, which this year harvested 1150 acres of barley which will yield thirty bushels to the acre and 300 acres of oats which will average over forty bushels to the acre. The productivity of the soil and the success of the company in cultivating it has prompted it to break all the land it could this summer and it will raise grain on 6,000 acres next season.

Appreciating the opportunity to obtain valuable property at a low price, the West Gallatin Irrigation Company, composed of Boston and New York capitalists, purchased 28,000 acres of land from the railroad company on this high bench and has constructed a canal at the cost of \$100,000 to furnish water with which to irrigate the soil.

The canal is completed for twenty and one-half miles and is to be extended ten miles further to cover every section of land owned by the company and the alternate sections of Government land at present unoccupied. There are about 4,000 acres of land already taken up so that it covers in all 60,000 acres. It is estimated that the canal will supply water for 20,000 acres under cultivation. It is fourteen feet wide at the bottom and twenty-four at the top. It will carry water safely four feet in depth and this can easily be increased to five feet. The fall is thirty-eight inches to the mile.

The company does not expect to farm its lands, though it has gone to the expense of breaking a hundred or more acres. Its work, however, in putting water on this valley is of vast importance as it opens for settlement and successful farming operations a fine section of the country which has remained unoccupied only because the water necessary to its cultivation was not obtainable. Farmers of small means can now take up the Goverment land there under the homestead law and obtain all the water they desire from the canal for a moderate rental.

The seeker for a home where he can raise fine crops and get remunerative prices for them; where his home can be erected at trifling expense; where fuel can be had by driving his own team to the mountains, a few miles distant; where all the advantages of schools and churches are already provided, should locate in this portion of the new West.

The mountain scenery and mountain air of Colorado have for twenty-five years attracted a class of well-to-do people from the East whose health has demanded the restoring influences of a dry climate and a pure, invigorating atmosphere, and much of the wealth of that State has been derived from the influx of this class of settlers. Montana offers even better advantages as a health resort than does Colorado. The altitude of her valleys is less than those of Colorado valleys and she has not, therefore, such sharp changes in temperature in summer between night and day. Her winters are milder because she lies much nearer the Pacific Coast and receives marked influence from the warm Chinook winds. She has equally good railway facilities. The country is greener, better grassed and better watered. She has more mineral springs of approved curative properties. One of these springs, known as Ferris Hot Springs, lies near Bozeman and is connected with the city by an omnibus line. From the new hotel at these springs more than fifty snow peaks can be counted on the horizon line, while all the near landscape is full of verdure, flowers and cold streams where trout and grayling abound.

The average farmer of the Gallatin Valley is to be congratulated if the following, taken from the Bozeman *Chronicle*, proves to be a fair sample:

"The first to thresh in this valley was B. M. Dawes, of Central Park. Mr. Dawes threshed



GALLATIN RIVER, MONT., VIEW LOOKING TOWARD HEAD-GATE OF CANAL.

part of his wheat and oats—he had no barley, except the black variety, which yielded heavy, but was badly down and tangled. From eighteen acres Mr. Dawes got 650 bushels of wheat, and his oats yielded about fifty bushels to the acre. Mr. Dawes was extremely fortunate in selling his oats to a local buyer at \$1.35 per cwt., oats to be delivered at once. The same dealer, so Mr. Dawes was informed, has since contracted with Mr. Waterman for 100,000 pounds of oats at a cent per pound. Theo. Norman, so we learn second-handed, has threshed some of his fall wheat, which yielded fifty bushels to the acre."

This item may be considered reliable, and it will not be at all surprising if these figures will be made to appear exceedingly modest by later reports. The soil in the Gallatin Valley is capable of doing wonders, if it is allowed a little timely assistance on the part of the weather clerk.

Whenever a "down-easter" gets his first whiff of Montana atmosphere he grows hilarious, mildly enthusiastic, or deeply, scientifically interested, according to his mental drift—but he is invariably appreciative of its good qualities. A newspaper writer from New York State some time ago visited Bozeman and the vicinity, and the following is a part of an extended article he wrote soon after:

"With the high altitudes of Bozeman we have rarefaction, and the expansion of the air is equivalent in degree to any given elevation. The result is a decrease of moisture, which is shown in the almost entire absence of cloudiness. For days at a time we saw no clouds, while up in the mountains—only the blue canopy of heaven above us. Thus it will be seen elevation is an agent which influences atmospheric humidity. Consequently, there are three noticeable features in the climate of Bozeman—sunshine, purity and rarefaction—qualities which experience has shown go to make an ideal climate. Too great an elevation is said to be objectionable, for with the pressure of the air removed hemorrhage of the lungs is likely to occur. The action of the heart is materially quickened and the blood vessels are unable to withstand the pressure put upon them and give way. Montana has an elevation varying from 3,000 to 6,000 feet, not considering, of course, the upper ranges. It is claimed that phthisis, or consumption, is due to germ

life, and we believe such theory is generally accepted by medical men. This germ life cannot thrive in a dry, rarified atmosphere. Hence where there is an absence of germ life there is the climate most beneficial to those afflicted with consumption."

It was in the dead of winter, early in January—the dullest season of the year for retail traffic, that the writer stopped for a couple of days at Bozeman. The temperature was about zero, the air dry and in delightful contrast with that of the Pacific Coast which he had left two days before. But there was no business to speak of; yet not a business man of the forty or more interviewed had a single word of complaint. There was no grumbling at what could not be helped. On the contrary, there was evidenced entire contentment with the present and utmost confidence in the future. And subsequent events have shown that their confidence was not misplaced, for Bozeman has enjoyed a prosperous summer, with a still brighter prospect for the next few months.

Montana still brings in from Iowa and Minnesota many thousands of pounds of butter annually to supply her cities and mining camps. Most of the old time farmers are unwilling to devote the labor necessary to milking and butter making. They have always made their income from grain and beef cattle and are too old to change their habits. It follows that there are capital openings for new men to go into the dairy business. And what finer location could a dairy farmer desire than one on the banks of these cool mountain streams, shaded by alders, aspens and cottonwoods, where the green pastures stretch out on all sides and where a railroad is in sight for convenient shipping to the city? There is a fortune waiting here for any practical dairyman who will make strictly first-class butter and furnish it regularly and at a good price to customers in Helena and Butte. We advise Eastern dairymen to look into this matter. One-half of the capital invested in the business in the East will fit up a ranch in good shape with an equal number of cows and the balance can be loaned at ten or twelve per cent interest. The cows will yield a larger net revenue and the owner will thus find himself in much better shape financially than he was in his old home.

For more detailed information regarding the agricultural and mineral resources of the Gallatin Valley and tributary country, and values of Bozeman real estate, the reader is recommended to address any of the following firms at Bozeman:

The Montana Mining, Real Estate and Investment Company, that handles Montana mining properties and real estate in Bozeman and the Gallatin Valley.

R. R. Finlay, agent for the Minneapolis syndicates, Capital Hill Park and Spring Brook addition to Bozeman.

Imes, Ferris & Co., real estate and loan agents and mining brokers.

S. P. Panton & Co., dealers in real estate, mines and mining stocks.

Swan & Irvine, real estate and mining brokers, mines and mining stocks a specialty.

Gardner, Smith & Co., real estate agents. Sole agents of Meadow Spring Suburb.

Lindley & Hundley, real estate, insurance, loan and collection agents.

C. S. Jackman, real estate and loans.
The Bozeman Board of Trade.



VIEW ON W. G. I. CO.'S CANAL, GALLATIN VALLEY, MONT.



Entered for transmission through the mails at second-class rates.

E. V. SMALLIEY, - EDITOR AND PUBLISHER.

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LETTERS should be addressed to

THE NORTHWEST MAGAZINE,
ST. PAUL, MINN.

ST. PAUL, SEPTEMBER, 1891.

AN IMPORTANT RAILWAY PROJECT.

Paul Schulze, of Tacoma, has made an offer to the city of Victoria, British Columbia, on behalf of Henry Villard's North American Company, which, if accepted, will practically release that city from its insular position and give it rail communication with the mainland of Washington by means of a steam transfer ferry, carrying cars across the Strait of Juan de Fuca. Mr. Schulze is president of a company organized to build a railroad from Port Crescent, opposite Victoria, through the new region of Western Washington between the Olympic Mountains and the ocean, southward to some point on Gray's Harbor, where it will connect with one of the lines of the Northern Pacific. If Victoria will give the company terminal grounds and one million dollars in bonds he agrees that a large transfer boat shall be constructed which will bring the cars of the new road into the capital of British Columbia. The cost of the boat and of the terminal improvements which would be necessary at Victoria would be fully as much as the subsidy and the proposition considered on a strictly business basis must strike the Victorians as a fair one.

On the American side of the boundary the interest in the project arises from the fact that the road will develop an extensive district of country into which only hardy explorers have yet penetrated. This coast region, shut off from the Sound and the Strait, is drained by the Quinault, the Queets and other small rivers flowing into the Pacific and by the Humptulips and the Hoquiam, which discharge their waters into Gray's Harbor. It is for the most part heavily timbered with fir, cedar, spruce and hemlock, but it contains some small prairies and the land along the river bottoms is rich and invites clearing. A few adventurous settlers have pushed up the rivers to take up claims, but without a railroad the region must continue to be what it is to-day—a trackless wilderness. The timber re-

sources, which are very great, the possibility of valuable minerals existing on the flanks of the mountains and the certainty that farmers will occupy the valleys as soon as the country is made accessible, combine to give to the railway project the appearance of a solid business scheme. So large a district lying in a State that is constantly attracting a heavy immigration, cannot long be allowed to remain isolated, unoccupied and apart. Mr. Schulze and his financial backers deserve credit for their ambition to be the pioneers in its development.

THE GRAY'S HARBOR TOWNS.

We assume that the recent suspension of the newspaper published for the past year and a half at the new town of Gray's Harbor, means that the ambitious project of creating a commercial city at that point, if not dead, has been put to sleep to await the developments of the future. This project enlisted the efforts of a number of able men, who placed it before the public in such a favorable light that they took in, during three or four months, for the sale of lots, over \$300,000 in cash. Most of this money they at once spent in building a mile-long wharf out into the bay, in grading streets, in clearing land and in erecting buildings. These managers have lost nothing and may have some profit remaining, but the lot purchasers have sunk their money unless there should come about an entire change in the situation on the Harbor.

The Gray's Harbor City project was based on the expectancy that the place would be made the ocean terminus of a railroad leading to the wheat fields and the coal fields of the interior. Its promoters avoided the established towns of Aberdeen and Hoquiam and purchased a large body of hilly, forest-covered land three or four miles seaward from Hoquiam, at the head of deep water in the north channel. Between this place and Hoquiam there is a bar, which large vessels cross only at high tide, and higher up, in the mouth of the Chehalis River, between Hoquiam and Aberdeen is a second bar. The argument for founding a new town so near the two already in flourishing existence, was that vessels could come up Gray's Harbor to its long pier without crossing these inner bars. Otherwise the site was naturally an unfavorable one, by reason of the width of the tide flat between the channel and the shore and the steep and broken character of the land, which rises in high bluffs from the water.

A railroad, to end at the new town, was commenced last year by Geo. W. Hunt, who spent a good deal of money on it and was obliged to abandon it under pressure of the vigorous antagonism of the Northern Pacific, which looked upon him as an intruder in its territory and proceeded to parallel his road. Before Hunt had laid any rails he retired from the struggle. His road, beginning at Centralia, was to have run down the Chehalis through Aberdeen and Hoquiam, terminating at Gray's Harbor City. The new branch of the Northern Pacific runs also to Aberdeen, but at that town it crosses the river and continuing on down the south side of the harbor ends at a new town called Ocosta, just inside the southern cape which protects the waters of the harbor from the surf of the Pacific. This line is almost completed. The Northern Pacific management announces that a road from Aberdeen three miles to Hoquiam will probably be built before long, but that it will not be extended to the new, speculative town of Gray's Harbor City. This decision leaves that town without visible means of support or rational cause for existence. It has at present about 250 inhabitants but it has graded streets sufficient for 10,000. Hoquiam, separated from it by only three miles of forest, is a handsome town of

1,500 people, with established lumber manufacturing industries and considerable sea-going commerce. Aberdeen, three miles from Hoquiam, has at least 2,000 people, and also thrives on the sawing and shipping of lumber. These two enterprising towns are growing towards each other and will soon be connected by an electric road.

THE BIG WHEAT CROP.

The wheat crop has been harvested throughout the Northwest and the yield is the heaviest for many years. This is particularly true of the hard wheat belt, which embraces Northern Minnesota, North Dakota and Manitoba. Atmospheric conditions in this region, from the sowing of the seed to the work of the binders, favored the growth of the wheat plant, the filling of the heads and the ripening of the berry. There was no drought in June, there were no hot winds in July, and August passed without untimely frosts. Here and there some devastation was done by hail storms, but such storms are always of limited area and every prudent farmer now carries hail insurance sufficient to cover the larger part of any possible loss. Current estimates for Minnesota and the two Dakotas place the average yield per acre at eighteen bushels. In the Red River Valley in both Minnesota and North Dakota, and also in Manitoba, this estimate will be exceeded. The total yield of the two Dakotas and Minnesota will not be less than 120,000,000 bushels, and that of Manitoba will probably reach 25,000,000 bushels. These figures are the result of careful calculations.

Prices of wheat are already amply remunerative and the tendency is steadily upward. Europe is going to want all the wheat we can spare. There is a shortage of cereals all over the Continent. Russia will have very little surplus of wheat to sell, and her rye crop, which is the main reliance of the peasantry for bread, is so scanty that the government has just forbidden by imperial ukase the export of any part of it. The India wheat crop falls considerably short of the usual yield, and the European deficiency cannot be made up from that quarter. The farmer of our Northwest certainly holds the trump card this year. He raises the best wheat in the world, he has harvested a splendid crop and he is certain of a good price, no matter how much pressure may be brought to bear on the market by millers' combinations and Chicago speculators. We do not advise any concerted movement to hold back the crop from sale. For the good health of trade the wheat ought to flow steadily out about as fast as railway lines and shipping can carry it to the consumers. In this way money will come in, the farmers' debts at the stores will be paid, the retailers will pay their bills to the wholesalers and general prosperity will prevail. Every farmer ought to build a granary, however, if he does not own one already, in which he can carry over till winter or spring a portion of his crop, and thus benefit by the higher prices which the best authorities on the wheat situation think will prevail next year. The farmer can profitably be his own warehouseman to some extent, instead of rushing his whole yield straight from the threshers to the elevators.

The effects of the fine crop will be instantly felt throughout the Northwest. Old debts will be paid, mortgages taken up, new implements bought, needed farm improvements made and a bracing atmosphere of courage and confidence will pervade the entire country. The towns will respond immediately to the stimulus of better times on the farms and all lines of business will improve. We believe that this year 1891 will long hence be noted as the time when our Northwestern region turned a sharp corner and started on a new career of great growth and progress.



OF the fifty principal cities of the United States Omaha made the greatest percentage of gain in population in the decade from 1880 to 1890, its increase being 360.23 per cent. In the list of all cities, however, numbering 443, Spokane stands at the head, having gained 5,592 per cent. Among all the Western States Washington shows the largest per centage of increase—365.13.

THE recent death of Laurence Oliphant, the English novelist and traveler, recalls the fact that he visited St. Paul in 1853 and wrote a book called "Minnesota and the Far Northwest" which was published in London in 1855. A copy of this book is in the library of D. A. Monfort, the St. Paul banker. Oliphant was a young man of twenty-one when he made his journey to the upper Mississippi, and was at that time attached to the British Legation at Washington.

IN early pioneer days in Minnesota Judge Flandrau walked all the way from St. Peter to Winona and back, a distance of 300 miles, and in the winter, too, to try a law-suit. He was a young attorney at the time and did not mind the tramp. His client offered to give him twenty dollars for his services or deed him forty acres of land in what is now the town of Mankato. Flandrau took the cash. He says that if he had taken the land he could have sold it in later years for \$40,000.

WHEN the Twin Cities of Minnesota join hands they will rank as the eighth city in population in the United States, the order being as follows: New York, Chicago, Philadelphia, Brooklyn, St. Louis, Boston, Baltimore, Minneapul. The rate of growth of our Northwestern metropolis is so much more rapid than that of St. Louis, Boston or Baltimore, and we have so much good new territory to fill up with new population in our tributary region that it is only reasonable to predict that by the time the next census is taken, in 1900, we shall stand fifth in the line of the great cities of the Union. The movement for a partial consolidation is gaining strength constantly in both Minneapolis and St. Paul. Those who oppose it are either actuated by evident selfish interests, arising from their ownership of outlying lots and additions which depend for their value on one or the other place growing away from its neighbor instead of towards it, or they are old war horse local politicians, who have so contracted the habit of fighting the sister city that they cannot change and fall in line with the new movement.

JAMES J. HILL, president of the Great Northern Railway, said recently that he wanted to go on record as of the opinion that there is no reliable wheat country in the Canadian Northwest beyond Brandon, Manitoba. Farther west, he said, there is a narrow belt where wheat can be raised with success one year in two or one in three, but it is not a profitable crop in the long run, owing to the chances of failure from drouth. As to the Saskatchewan Country and the Peace River Country, it is absurd, he continued, to speak of them as wheat regions. A Scotchman once explained the reports of successful wheat

crops far up in the Northwest, on Peace River, by saying that the growing grain is covered with sheets and table cloths in August to protect it from frost and is harvested in September in a snowstorm.

KNOWING that August frosts sometimes strike down into North Dakota, I have never had any faith in the boastful statements of the Canadian boomers that the wheat producing belt would eventually stretch across the great plains through Assiniboina and Alberta, to the base of the Rockies, where the north branch of the Saskatchewan heads. The truth is, the western limit of profitable wheat growing has already been reached in both the Dakotas and in Manitoba. This is a good thing for the farmers who are in possession of land within the safe wheat region. When this fact is generally known, however, there will be an end to the jingo oratory of the Ottawa statesman about the vast, fertile, Canadian Northwest, that is to fill up with farmers and to be to the future Canadian nation what our American West is to the United States. Mr. Hill may draw his wheat line a little too far east in running it through Brandon, but any settler who goes a hundred miles west of that prosperous little city to make a living by wheat farming will be poorer after ten years effort than when he started in.

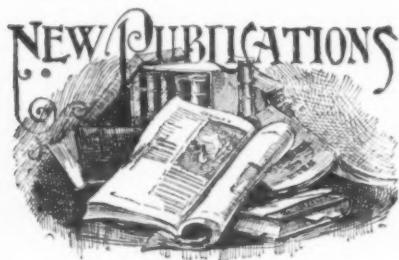
IN the mosaic of Minnesota's population are many odd bits, representing minor European races or peculiar religious sects. I never knew, however, that among these is a Mormon community, until I read the other day, in the Fergus Falls Journal, the account written by the editor, Elmer E. Adams, of his tour in his own county of Otter Tail. He describes a little Mormon settlement at Clitherall, consisting of a few families, the older members of which migrated from Southeastern Iowa in 1864. They are presumably Josephites, although he does not say so, like their brethren who still remain in Iowa and like a small colony in Montana. The Josephites never recognized Brigham Young as the successor of Joseph Smith and never adhered to the doctrine of polygamy. The elder of the Clitherall community, Mr. Whiting, was asked by the editor whether the organization of the Mormon church was still kept up and whether the rising generation still adhered to the Mormon belief. He replied that the people met for worship every Sunday but that "our children are like a great many others; the Sunday ball game is a greater attraction than the church."

A CYNICAL friend of mine often entertains the early comers to the Monday morning meetings of the St. Paul Chamber of Commerce, in the office of the secretary of that body, with his pungent criticisms on popular opinions and institutions. Lately he said that about three-fourths of all the teachers in the St. Paul public schools are Catholics and that a large majority of the letter carriers of the city are of that religious faith. The reason he assigned for this curious disproportion of Catholics to Protestants was that the Catholic applicants for positions are able to pass much better examinations than their competitors of other faiths, because the Catholic parochial schools educate children more thoroughly than do the public schools of the city. In the public schools, he went on to say, a boy studies fractions for ten or twelve years and then the chances are that he will not know how many pecks make a bushel or how many feet a rod. His "gray matter" is exhausted in struggling with problems that could not be solved readily by our most successful merchants or our best bank tellers—problems that have no sort of relation to the arithmetic of everyday business life. Then my cynical friend proceeded to de-

velope one of his pet theories—that our system of public education has produced a class of people who call themselves educators and that they run the system for their own benefit rather than for that of the school children, making it more and more complicated and more and more expensive.

STILLWATER is a quaint little city. It is built on terraces that rise rather steeply from the coffee-colored waters of the St. Croix River. The terraces have a semi-circular sweep and are hemmed in by limestone cliffs. On the first bench there is room for two business streets and for the railway tracks and station; on the second one street only finds place and so on the third and fourth. The chief business street stops abruptly at one end at the foot of a great, bastion-like precipice and if you wish to proceed further in that direction you must climb stairs more formidable than those at Quebec which lead from the lower to the upper town. Once at the top of these stairs you find yourself in a pretty, airy quarter of residences. Up to this high ground the electric cars manage to ascend by a winding route. The placid river is a half mile wide and the Wisconsin shores are bold, wooded bluffs. All the long, broad stretch of quiet water is filled with thousands of logs, held by booms, waiting to be made up into rafts for a long journey down the Mississippi or to be made into lumber at the mills along the Minnesota shore. A single bridge, part piling, part trestle and part pontoon, spans the stream. The city is well-built, rich and contented, and has forgotten that it was once a rival of St. Paul and was then the largest place in the new territory of Minnesota.

AMONG the life prisoners of the Minnesota penitentiary, at Stillwater, is a remarkable man named Porter, who edits a weekly newspaper called the *Prison Mirror*. Porter has made himself an authority on all matters relating to prison management and discipline. He has read all the best authors on the subject and studied the reports of many penal institutions; and having a naturally bright intellect, cultivated by constant application since his confinement, he is able to do a good deal of sound, original thinking. He divides the convicts in a penitentiary into three general classes; first, those who are sincerely repentant and are ambitious to improve so as to make good citizens when released; second, those who are indifferent, but are capable of being reformed by proper educational methods and discipline; third, those who are criminals by instinct and inheritance and who speedily return to the paths of vice when they have served out their sentences. Porter thinks that the next step forward in prison methods will be to distinguish and separate these three classes, so as to give the first larger opportunities for improvement, and the second a training and government different from that required for the thorough restraint of the third, or hopelessly vicious class. Porter's paper is handsomely printed and carefully edited and is regarded by the prison authorities as a valuable educational and moral influence in the prison. I was taken through his printing office during a recent visit to the prison and had a moment's talk with him, but the rules of the institution hurried our party along, the one usher employed being bound to return as soon as he could to the wicket room to escort the next group of sight-seers on the prescribed round. I would gladly have remained for half an hour to talk with him. He impressed me as a man of much force of character. Many Minnesota editors have asked for his pardon, believing that he has already atoned for a crime of passion committed in his youth and is fitted to do the State better service as a free man than as a convict behind stone walls.



The "Official Northern Pacific Railroad Guide" for 1891-2 is a well bound, profusely illustrated book, printed on fine paper, an interestingly written description of the states and towns upon the railway's route. It contains a fine map in a pocket of the cover and will give timely information to the host of summer tourists. It is published by W. C. Riley, of St. Paul.

There are, doubtless, people who, because of the magic "By the Marquis of Lorne" upon the cover, will read "From Shadow to Sunlight." They will be sufficiently punished for snobbishness by the undeviating stupidity of the book. It is well that the Marquis is not dependent for his living upon his pen for his work does not even show promise. "From Shadow to Sunlight," by the Marquis of Lorne; Appleton & Co., N. Y., publishers.

"This Continent of Ours" is the second of the "Picturesque Geographical Readers" series, a readable and well illustrated book designed to supplement school study in geography, written in conversational style. In the appendix is Prof. Henry R. Russell's article upon the Solar Camera in which he tells how a boy can make that pleasant accessory for a sum not exceeding six dollars. "This Continent of Ours," by Chas. F. King; Lee & Shepard, publishers, Boston.

"A Mystery of the Campagna" and "A Shadow on a Wave" are two very original short stories bound in a unique narrow book. To thoroughly appreciate the first it should be read late at night and after a nervous day; not Poe himself could horrify you more. It's the simple story, told by his friend, of a young Italian artist who whimsically shut himself in a deserted palace and faded out of life. His friend is ill, delirious and maddened with the idea that Marcello is being murdered. So insistent is the sick man that two offered to go to the palace to bring word that Marcello is well. They witness his meeting with a beautiful woman and his disappearance. So it is only a love affair! Disgusted, they return to the city, but the sick man is in no wise satisfied. The shade of Marcello appears before them all and again they go to the palace to find him dead within an ancient, underground tomb. Near by was a sarcophagus and an old Latin inscription "To Vespertilia, the blood drinker, the vampire woman and Flarius, her lover, himself hardly saved," and the tale is told. It is written with a simplicity which makes the old myth seem real and intensifies the horror.

Very different is the second story, an unusual and delicate one, the story an artist tells of his sudden, pure, manly love for a beautiful Venetian whom he only sees as he sketches while his wife is in Paris. It is short, yet you feel as you read that you have heard the story of a life. The artist's wife is as real as your own. "'What, three slimy poles and a bit of green water!' she exclaimed; 'Was that all you did in a day? Why didn't you paint a whole view?' I do not like her to criticise my studies. She handles them unlovingly, looks at them upside down, and says, 'If you would only enlarge that and put in some figures, I might have the pink dress after all.' Three palaces, several gondolas, and flocks of pigeons mean the pink dress, and six palaces,

more gondolas and more pigeons mean Paris and Judic." His pictures had resulted in gowns enough for Paris, and the artist goes to sketch, love and suffer in Venice. It is most gracefully told—and the end? The beautiful girl dies of a broken heart helped out by starvation, the pretty little wife comes back and life goes on. A charming story full of good touches. "A Mystery of the Campagna" and "A Shadow on a Wave," by Von Degen, the "Unknown" Library, Cassell Publishing Company, N. Y.

St. Paul seems to be breaking out in a literary way. The latest, though, is the third edition of Gen. C. C. Andrews' work on Brazil. Mr. Andrews is ex-consul to that country and was formerly United States minister to Norway and Sweden. The book is a touch-and-go description of that interesting country, its condition, customs and prospects, with an added account of the deposition of Dom Pedro. The book contains many interesting facts, and is one a body can pick up and lay down without detriment to the style, which is jerky and unsymmetrical, so to speak. The author's observations, though, are of the kind which pass before the eyes and therefore make a picture of the country. Mr. Andrews treats of our American-Brazilian relations and explains how it is that so natural a market as Brazil for American manufactures is mostly monopolized by European countries. He says there are twenty ships arriving from them to one from the United States, and that the Brazilians, being poor, obtain long credit from them more readily than from us. He thinks, evidently, that reciprocity with Brazil would not be so valuable to us as to her. The saving to Brazil in admitting coffee to our country free of duty, instead of from three to fourteen cents a pound duty as charged by European countries, has lately procured her two fine war ships, better, in fact, than any this great country can boast. One chapter is devoted to the erstwhile emperor, and an entertaining one to the characteristics and odd customs of the people of Rio. Those who are interested in South America, and especially in the country which promises the greatest future, will enjoy this book, which has considerable new information upon the subject. "Brazil, Its Condition and Prospects," by C. C. Andrews; D. Appleton & Co., New York, Publishers.

The tide of erotic novels has already turned. Rot and rotten, they are being relegated to the slums they are fit for and pure and wholesome stories bid fair to become positively fashionable. Within a month after the publication of Birch Arnold's "A New Aristocracy," the first edition was exhausted and there were 500 orders toward the second. Mrs. Arnold is a middle-aged woman, a mother, an invalid who speaks from a quiet life to the gold-worshiping, selfish, snobbish world, and says, "Let us look for something higher and holier. Let us learn what it means to be thoughtful and tender, one for the other. If we cannot always say 'My brother and I,' let us at least try to voice 'I and my brother.' Fortunately, I found the world ripe for such utterances." The story is of two well-born sisters, educated but poor, one of whom does "slop work" and one becomes a rich woman's cook. Both are filled with practical love for those surrounding them and devote their lives to helping. The pretty cook wins the true love of her mistress' millionaire brother, but dismisses him when she finds him indifferent to the aims of her life. However, that life brings forth tardy fruit in his mind and he returns to marry her and to live upon the plane of daily helpfulness upon which "Elsie" lives. The book has many hard raps in it, such as, "One of the first of these lessons is not to ask any more of the world because of her sex. When women cease clamoring for a man's rights and a woman's pre-eminence at one and the same time,

then will the dogged opposition of those to whom she appeals be less noticeable." Mrs. Arnold's story is one bound to have a good influence and to direct thought in a channel which is becoming worn by the minds of those who can see beyond themselves. "A New Aristocracy" by Birch Arnold; Bartlett Publishing Co., New York and Detroit.

It will doubtless surprise most lovers of poetry to see how many sonneteers of real merit have arisen in our literature. In "Representative Sonnets by American Poets," Charles H. Crandall has set over four hundred gems, discriminatingly selecting the most brilliant, best cut, most vividly colored. Some of the sonnets appear for the first time. A few are newspaper waifs, many are gathered from the works of such poets as Longfellow, the best American sonneteer, without doubt, and who gloried in this form of verse, this "little picture painted well," the "Sonnet (which) is a moment's monument." It is only the student of the mechanism and history of poetry who will greatly enjoy Mr. Crandall's opening essay upon the sonnet, which he terms "a gem in the domain of literature which has outlasted seven centuries, and has glowed with the choicest thoughts of such souls as Dante and Shakespeare, Milton and Wordsworth, by the chrism of whose genius its hope of immortality may be as well founded as almost any emanation of the human mind." The ordinary lover of poetry, however, will feel small interest in noting whether a sonnet be Petrarean, Spenserian or otherwise. Indeed, that is like spending one's too short leisure with his lady love in studying her attire, or puzzling over how she "does up" her golden hair. The essay is scattered with fine sonnets from other literatures.

Two sonnets having special interest in St. Paul are "In Weimar," and "Karnac," written by Mrs. Emma Taylor Lamborn of this city, a sister of Bayard Taylor and wife of Col. Lamborn. She has published privately a book of sonnets. Read, too, that by Joel Benton:

DAKOTA.

Sea-like in billowy distance far away,
The half broke prairies stretch on every hand;
How wide the circuit of their summer day,
What measureless acres of primeval land.
Treeless and birdless, by no eyesight spanned,
Looking along the horizon's endless line,
Man seems a pygmy in these realms of space;
No segment of our planet—so divine—
Turns up such beauty to the morn's fair face!
Here are soft grasses, flowers of tender hue,
Palimpsest of the old and coming race;
Vistas most wonderful and vast and new;
And see—above—where giant lightnings play,
From what an arch the sun pours forth the day.

"Waiting," by Mr. Crandall himself, is a beautiful thing, showing him quite worthy of prominence in the book. "Our Dead," by Arlo Bates, and "The Judgment of Love," by William C. Davenport, are exquisite; so are—but the list is too long. Women take a very prominent place; Mrs. Julia Dorr, Dora and Elaine Goodale, Helen Hunt Jackson, Emma Lazarus, and many others.—"Representative Sonnets by American Poets," edited by Charles H. Crandall; Houghton, Mifflin & Co., Boston, publishers.

The latest of the "American Statesmen" series, "Lewis Cass" by Andrew C. McLaughlin, assistant professor of history at the University of Michigan, is a real addition not only to biographies of men of note, but to that part of the history of this country which is not well known, the nominally peaceful epochs with England before and after the war of 1812. A most vivid picture is presented of life and influences in the far Northwest, the unknown frontier; in short, Michigan, which territory embraced much of what is now Wisconsin; of the gay, easy-going Frenchman, with his fire-water for the Indians, "supported by the power and cunning of France"

under Louis XIV. who "was ready to salve his conscience with the statement that brandy not only secured the trade of Indians but drew them from English Protestantism within the blessed influences of the true religion;" of the insolent, over-bearing English and their encroachments; of the brave and pushing Americans who at last journeyed into this wilderness from the East, and dominated all. "The great American desert has been a very movable spot in our geography." Under circumstances so well shown by the historian it is, as he says, "not chimerical to imagine that Michigan might have continued hostile to the common life of America, had it not been for the energy of one of the most American of American statesmen; might not the Frenchmen of Michigan and Wisconsin under other circumstances have continued an unassimilated, dissatisfied class as they have in Canada, a problem to the government, a nation within a nation?" The man who prevented that, almost alone, was Lewis Cass, the man whom "Solomon Sibley on his way to Detroit, his friend of after years, found pounding corn in a hollow stump before his father's door" in Ohio. Cass' life speaks for itself and he is fortunate to have a chronicler like McLaughlin, who speaks with the force and moderateness of a student of history and does not descend to panegyric. He simply tells the plain and interesting story of the progress of a typical American from the farmer boy to law student, to State representative at twenty-four in Ohio a year before he was eligible by law, to influence there. Right here Cass began his broad career by assisting in exposing Burr's conspiracy and winning the regard of Jefferson who made him United States marshal, which he was until appointed colonel at the opening of the war of 1812. Cass "took his stand in the bow of the first boat in which the troops were conveyed across the river, and was the first American to set his foot on Canadian soil after the declaration of war." It was only natural that he who had done so much to preserve Michigan to the country should become its territorial governor, and the book shows how largely that great country, reaching even to the Twin Cities, is indebted to his wisdom. "Twelve years later, in Northern Wisconsin and Minnesota, he relieved the Indians from want, and with gentle reproof took from the necks of their chieftains their British medals and placed in their stead a miniature of their great and mightier 'Father at Washington.'" And surely nothing braver has ever been chronicled than his going unarmed and alone into the midst of hostile Indians and tearing down and trampling under foot the British flag they had insolently raised. "At Prairie du Chien he addressed the assembled braves on the sin and folly of drunkenness, and to point his moral by showing that stinginess was not actuating him, he broke in the heads of several casks and allowed the liquor to rush out upon the ground amid the despairing cries of the thirsty warriors." The cabals of Jackson's term are incidentally introduced, for now Cass is Secretary of War. Next he is minister to France, then United States senator, candidate for the Presidency, then Secretary of State, and lastly an honored literary man living his quiet, luxurious, hospitable life, surrounded by his children, weighted by honors and years in his home in Detroit, and dying there at eighty-four in 1866. The record is one of a singularly pure and noble life, and the book is "as interesting as a story." The style of binding, too, is new. The book invitingly opens flat, yet is strong.—"Lewis Cass," by A. C. McLaughlin; Houghton, Mifflin & Co., Boston, Publishers.

BETWEEN PAPER COVERS.

"Coupon Bonds and Other Stories," by J. T. Trowbridge, rightfully belongs to the "Good Company Series." It is a collection of late

stories by that ever popular fabricator which will prove a delightful companion on board a train or for a day in the woods. Published by Lee & Shepard; price 50 cents.

"Why I am What I am" will interest a great many people inasmuch as that question is answered by a number of famous divines of all the leading denominations. The book is ended by a chapter on "Crumbling Creeds" by Ingersoll. It is published by J. S. Ogilvie, of New York.

"The Three Miss Kings" is an entertaining story of three beautiful girls who had lived an isolated life on the ocean's side in Australia who decided to make a dash for Melbourne to see life. Educated in books but ignorant of life, they fall upon their feet, are "taken up" by a woman of consequence and are happily married off, everyone. Not a thrilling story but a pleasant one, and the characters are well drawn. Australia is rather a new setting, too, though there's little description in the book. Ada Cambridge is the author, and Appleton publishes it in the "Town and Country Library," price 50 cents.

To the same series belongs the Hon. Lewis Wingfield's "The Maid of Honor," a book that has no discernible reason to be. It is dull, the heroine's a fool, the story is unnatural and progresses lamely.

The field of romance concerning Columbus and his times is rich but unworked. Now is the best of times to work it, but "Columbia, a Story of the Discovery of America," is a dead failure. It is the school-boy history of his voyage weakly diluted. The writer is John R. Musick; the publisher, the Worthington Co., of New York, which has printed the work in a manner worthy a better.

The Twin Cities are interested in the work of Dr. Albert Shaw, who has lately removed from Minneapolis to New York. His study of municipal "Paris" in Harper's for July, shows his usual clear-sightedness and is an important paper on an important subject. PALMER HENDERSON.

CHARACTER IN HANDWRITING.—Graphology, which is very lightly studied in this country, is vastly considered in England, where many women, young and old, make a profound study of reading characters through handwriting. In the society set a Miss Valentine is often startlingly successful. Not long ago at breakfast, the company listened with breathless interest while she unfolded the virtues, vices, ambitions and vagaries of the authors of various specimens of handwriting presented for her consideration. Merely from the address of an American she minutely and accurately described the writer, even telling that the lady was a skilled musician. One of the men produced an envelope directed to himself, and she announced instantly: "The man who wrote that is a clergyman, and I should think rather high in the church." It actually proved to be from the Bishop of Lincoln. A young daughter of Sir William Bruce is said to be the most remarkable palmist in England, but is chary of exhibiting her skill.—*Illustrated American.*

THE RED RIVER PRAIRIE—AUGUST.

All moated in pellicid haze and sheen
Nods the vast wheat field, billowing in mid space;
For foreground leagues of awaying grasses green:
For final rampart given the forest's grace.
Crowned of the sinking king, who shaketh forth,
Erie form and sublimite, his gold
Throughout the flawless skies and emerald world,
More precious than all garnered wealth of earth.
Lastly, one cloud bank in the horizon's rim,
Empurpled, vacuous, amber's tenet and beryl—
Mete portal to the blessed isles, and dim,
Vast, halls of peace; where, past all cant, and peril,
Aud combat dust, and fever pulse of life,
Men's o'erworn sense might surcease gait of strife.

R. OF P.

MINING SECTIONS TRIBUTARY TO MISSOULA.

BY RICHARD MARSH.

During the early sixties the discovery of placer gold in Cedar Creek, Welcome Gulch, and other portions of Missoula County was the signal for a wild stampede. Scenes rivaling those that have been so graphically described by Bret Hart and Prentiss Mulford were enacted. Some made fortunes and many met disappointments. A few years sufficed to exhaust the richest of the gravel bars, and much of the roving population left for other fields. The magnificent agricultural and timber resources of the county attracted a different class of emigration and for several years the mines received but little outside attention though the yield of placer gold always remained an important product of the section.

By its natural location and the construction of railroads the city of Missoula is rapidly becoming the supply centre for a vast stretch of mineral country containing some of the most productive mines of the west. To the east are the mines of Wallace and Camas Prairie. They are distant about twenty-five miles. Of these the Togue property is working two shifts of men and is shipping considerable good grade lead carbonate ore.

The mines of the Bitter Root Valley are to the south, the ranges on either side showing veins of nearly every description. The Curlew at the foot of the mountains and thirty miles south of Missoula is a very profitable mine. It is the property of the Helena & Victor Mining Co., and during the past eight months has paid dividends amounting to \$10,000 per month. Last fall a hundred-ton concentrator was erected on the property and has been running uninterruptedly since. The mine is most favorably located three miles from the Bitter Root Railroad with all the natural advantages of water and timber in its immediate vicinity. On the high mountains at the head of Bass Creek, a tributary of the Bitter Root River, is located the Cliff mine. Inaccessibility has rendered the development of this more difficult; a trail was completed to this last spring and two shifts of men are now employed. Ore is being sacked and the mine will soon become a regular producer. On Eight Mile and Lo-Lo creeks, both tributaries of the Bitter Root, are numberless promising prospects which will in the future add their quota to the metallic product of the county.

To the west of Missoula the mountain ranges on either side of the Missoula River are traversed by several distinct mineral belts, and the gravels in the gulches and ravines are generally auriferous in their character. In many places large banks of gravel offer a promising field for the hydraulic miner. During the past few years large flumes and giant hydraulic pipes have been put in Cedar and Windfall gulches, and returns from such investments have been very satisfactory.

There is in the county a large area of placer ground which, while not rich enough to be worked by the primitive methods at command of the ordinary prospector, by the investment of some capital in digging ditches, building flumes and putting in hydraulic pipes, in short, by the adoption of scientific methods of mining, can be and are being made immensely profitable.

In the mountains on the south side of the river gold seems to be the principal value in the mineral veins that cut the primitive formations that here predominate. On the north side of the river at Nine Mile Creek, Flat Creek, Deep Creek and Spring Gulch, lime shales, magnesian shales, and other schistose rocks form the body of the range, and contain numerous ledges carrying high grade silver, lead and copper ores. The completion of the Cœur d'Alene branch of the Northern Pacific has but recently placed this

portion of the county within reach of a market. The Low Mountain Mine on the head of Flat Creek has so far been the heaviest shipper. In this mine several veins of rich silver lead ores traverse a mineral bearing zone about 200 feet in width running easterly and westerly through the lime shale. The shale in the vicinity of these veins is heavily impregnated with galena and other silver bearing minerals; thus forming in addition to the smaller veins of clean ore an immense mass of material subject to concentration. For the purpose of working this the company is now erecting a concentrator of fifty tons daily capacity. The Iron Mountain Company has paid from the hand sorted ore taken from the smaller veins dividends amounting to \$100,000. With the completion of the new mill the profits must be largely augmented and of course the number of men employed greater. From fifty to sixty men is the present force.

and Queen are among the promising properties of the district which is rapidly coming to the front. It is sixty miles west of Missoula and tributary to it.

One hundred miles northwest of Missoula are the mines of Thompson River, of which the Buckeye and Bell Stowe have been large shippers and give employment to from twenty-five to thirty miners.

The northwestern portion of the county embraces what is generally termed the American Kootenai. It is a region wildly picturesque, which for years has been known to contain immense veins of valuable ores but the remoteness from market and difficulties of transportation have until recently interfered with its development. As soon as it became definitely settled that the route of the Great Northern Railroad would be through this section prospectors thronged into its mountain fastnesses

grade ores have been made profitable, which by older methods could only have been worked at a loss, and vast sums have been added to the nation's wealth. The branch of the Northern Pacific from Missoula to the Cœur d'Alenes was opened to traffic August 15, thus adding another rich mineral section that will in the future necessarily look to Missoula for a large portion of its supplies. A free excursion was given in which hundreds of Cœur d'Alene people visited Missoula and the bond of commercial union was cemented on a firm and substantial basis.

One hundred miles to the east are the world-renowned Granite Mountains and Bi-Metallic mines which have paid millions in dividends. All of these vast, productive, and promising mining regions surrounding Missoula are, with the building of wagon roads and railroads, more and more seeking Missoula as their natural supply point. The location of Missoula to the mines of Western



MISSOULA MERCANTILE CO.'S ESTABLISHMENT, MISSOULA, MONTANA.

On Deep Creek two miles to the west, several promising mines are located. Of these the May Day, U. S. Treasury and Little Anaconda have attracted considerable attention. The U. S. Treasury is being worked by two shifts of men and is under bond to a Missoula Company for \$20,000. It shows eighteen inches of clean shipping ore and a large body of concentrating ore. The Little Anaconda is on the same vein and is operated by an incorporated company. The ore is a galena running from sixty to 130 ounces in silver. Three shifts of miners are employed and a great deal of systematic development has been done.

To the west of Deep Creek is Spring Gulch, a mineral district of great promise. The formation is a magnesian shale and the ore found has been unusually high grade in silver. The Keystone, located on the west side of the gulch, is a very promising mine and is making regular shipments of a carload of ore per week. The O. R. & N. has shipped considerable ore. The Little Pittsburgh, Eldorado, Ben Lomond, and King

and have demonstrated it to be one of the richest mineral districts of the Northwest. The veins are usually contacts between quartzite and slate, are large and show immense croppings. This vast area of mineral country will undoubtedly contribute immense sums to the nation's wealth, much of which will pass in the channels of trade leading through Missoula.

About 100 miles to the west of Missoula and just across the Montana boundary into Idaho are the famous Cœur d'Alene Mines. Little need be said of these. They have a world wide reputation. The statistics show them to be classed among the most productive mines of the continent. They support a population of over seven thousand in thriving communities along the South Fork of the Cœur d'Alene River. The latest and most approved methods of scientific mining have been here adopted. It may be said that the discoveries of these mines have been largely instrumental in the development of some of the best systems of fine engineering and ore concentration now in use. Vast bodies of low

Montana and Northern Idaho is similar to that of Denver to the mines of Colorado and it must eventually become one of the great mining centres of the West. Complete and reliable information regarding the various resources of Missoula and surrounding country can be obtained by addressing any of the following named firms or persons.

Stoddard & Low, and Geo. F. Brooks, real estate, insurance and civil engineers.

J. H. Fairchild, secretary and manager Missoula Realty Company, and W. H. H. Dickinson, mining expert.

M. E. Rutherford, mines and mining stocks, real estate and loans.

Frank G. Higgins, president, and George C. Higgins, cashier, C. P. Higgins' Western Bank.

Cornish, Winstanley & Tower, real estate, insurance, mines and stocks.

McConnell, Cook & Co., real estate, loans and insurance.

Oregon Crops Never Fail.



BIRDSEYE VIEW OF PORTLAND, OREGON, 1891.

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The Second City of the Pacific Coast.

Portland is growing faster than any City west of Chicago, and there is every evidence of a continued steady growth. Where population centers property advances in proportion.

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Portland, the only great Railway, River and Ocean Shipping Center west of the Rocky Mountains,

without saying her **INCREASE OF 365 PER CENT** during the last ten years, (placing her the **39th City** in the Union against the **110th** in 1880), must be far more than maintained in the next decade.

We invest money for clients, in Business or Residence Property, or in Suburban Lots, to the best advantage. Send 3cc. for 31x46 inch colored Lithograph Birdseye View of Portland, with many of the finest buildings shown on the margin.

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SOLID REFERENCES:

The Governor of Oregon says:

EXECUTIVE OFFICE,
SALEM, OR., April 21, 1891.

To whom it may concern:

I have been acquainted, for several years, with Messrs. Geo. W. McCoy and Richard Clinton, composing the Clinton & McCoy Co., of Portland, Or., and I have found them to be gentlemen honorable and reliable in their dealings. They are large owners of city and suburban properties at Portland.

SYLVESTER PENNOYER, Governor of Oregon.

The Mayor of Portland, six Leading Bankers, one U. S. Senator and the Portland Postmaster say:

PORTLAND, April 18, 1891.

To whom it may concern:

The undersigned have done business with and have intimately known the members of the Clinton & McCoy Co., for the last ten years, and have always found them men of excellent judgment and financially a strong and solid firm. They own very val-

able city and suburban properties in Portland, and are highly honorable men, with both the disposition and the ability to carry out to the full all contracts they may make. This firm is progressive, yet sufficiently conservative to make safe investments for their patrons. All investors can do business with this reliable firm with perfect confidence.

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G. M. WITTINGTON, Cashier First National Bank.

I. A. MACRUM, Cashier Merchants National Bank.

R. L. DURHAM, Cashier Commercial National Bank.

D. F. SHERMAN, Cashier Oregon National Bank of Portland.

LADD & TILTON, Bankers, Portland.

D. H. HARTMAN, Treasurer Northwest Loan and Trust Co., Portland, Or.

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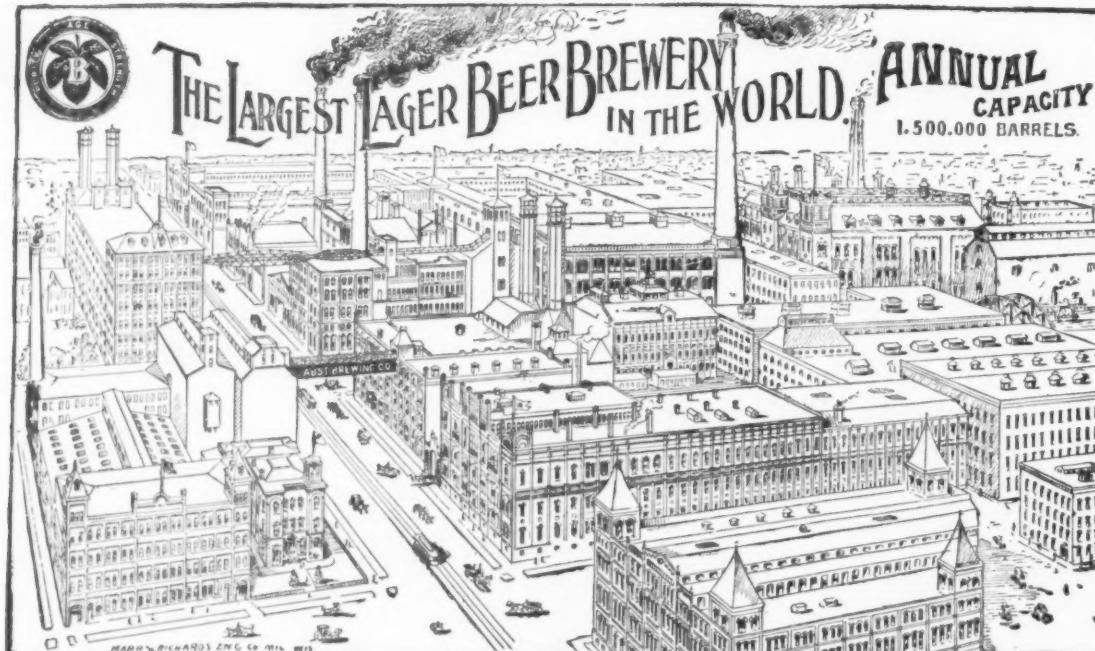
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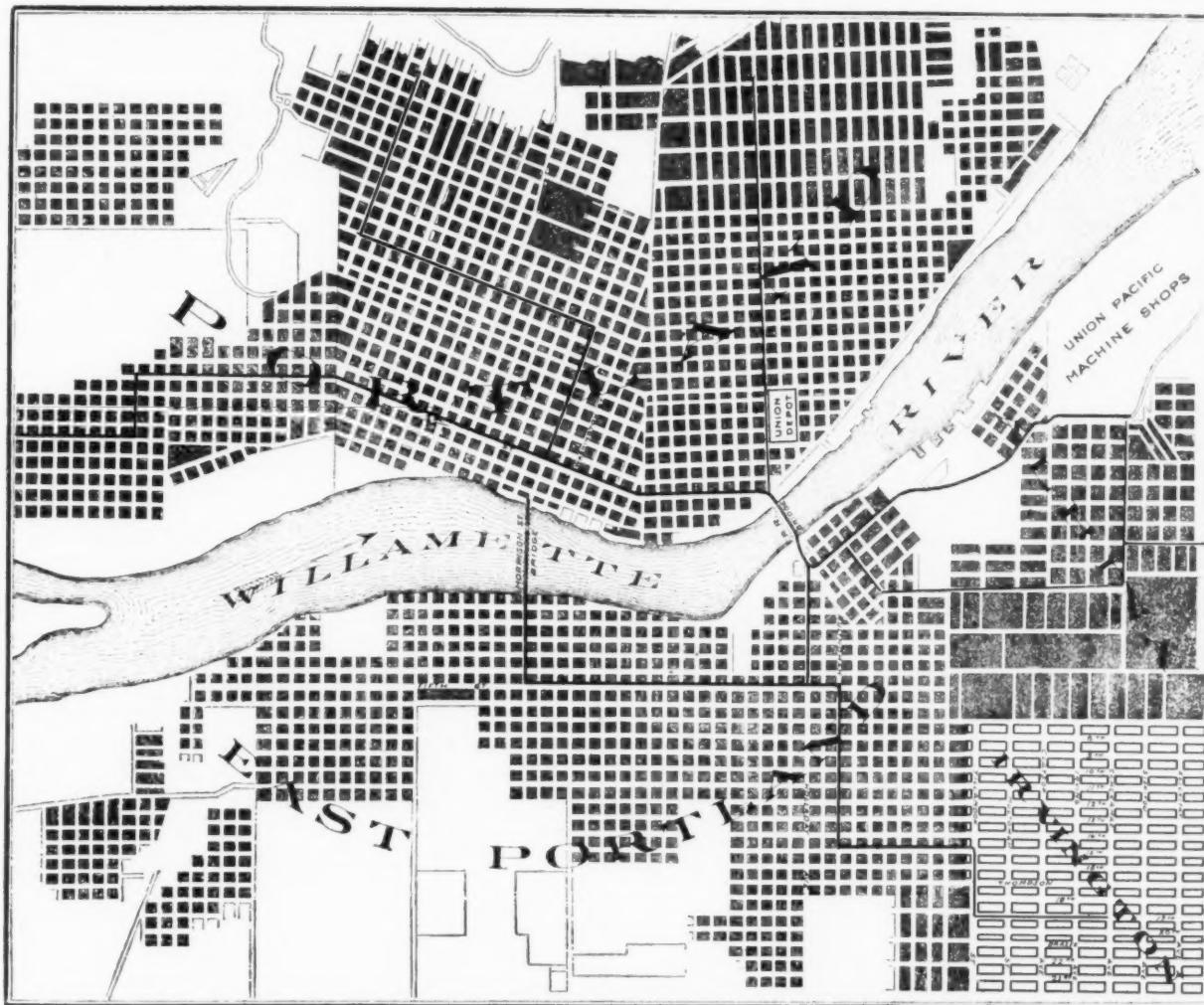
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IRVINGTON.

Map showing the situation of "IRVINGTON," a Suburb of Portland, Oregon.

On the east side of Willamette River, a little over one mile from the business center of the City of Portland and connected with same by electric street car lines as shown on map, and reached in ten minutes time. The situation of IRVINGTON is most slighty, the elevation being about one hundred feet higher than the business portion of Portland. The streets of Irvington are sixty and eighty feet wide, and are being graded to established grade, thoroughly graveled to a depth of twelve inches, with six foot sidewalks, and water mains laid in the streets supplying abundance of pure water. The fare from Irvington on the electric lines, either via the Railroad bridge or the Morrison Street bridge, is five cents, with privilege of transfer to Third Street electric line in Portland, and good to all parts of the city. Transfer can also be made to lines leading to Albina.

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PORTLAND, OREGON.

Population 1890.....	80,000
Exports 1889.....	\$12,000,000
Manufactures 1890.....	\$27,000,000
Real Estate Sales 1889.....	\$13,000,000
" " " 1890.....	\$14,000,000
Miles of Street Railway.....	85

Capital Invested in Business.....	\$70,000,000
Erection, 2,000 Buildings 1890.....	\$8,000,000
Wholesale Business 1889.....	\$115,000,000
" " 1890.....	\$132,000,000
Invested in Manufactures.....	\$16,000,000
Men Employed in Manufactories.....	10,000

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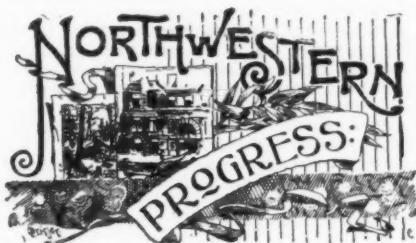
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Minnesota.

THE WADENA AND PARK RAPIDS RAILROAD HAS BEEN COMPLETED TO PARK RAPIDS.

DULUTH celebrated last month the opening of the new Lyceum opera house, one of the handsomest theaters in the country. It forms a part of a seven story office block and stands on Superior Street near the Spalding House.

THE BANNER STATE.—In our opinion Minnesota is the banner State of the Northwest. It has already reached that stage of development where it shows more diversified industries and employments than any of its sisters, a condition of paramount importance, affording unequalled power in attracting people and capital, and rendering its population cosmopolitan in character, and on that account doubly strong and interesting. Minnesota is already great by reason of the variety of her natural resources and the development of her industries, and is destined to become far greater and richer upon a more extensive development of these. She is unlike some of the States of the group, which, while very productive and offering many attractions to the agriculturist, has no mineral deposits and is sparingly provided with timber, and therefore does not attract the mechanic and miner. The northern and eastern portions of Minnesota are covered with a dense growth of timber, consisting of hard woods of almost every variety and white pine, and in the depths of her soil is found iron in inexhaustible quantities. The lumber industries of the State are in their infancy and the mining industries are still less developed, yet the annual productions in both have already reached large figures. Her grain producing powers are only partially developed, although she has garnered in a single year 42,000,000 bushels of wheat and a proportionate amount of oats and barley. Her capability of raising flax is equally good, and with linen mills recently established in Minneapolis an impetus will be given to this crop that will make present figures look small, and will add materially to the aggregate of her agricultural products.—*Moorhead News*

North Dakota.

ALL North Dakota interests unite in rejoicing that Hon. Thomas Lowry is again at the head of the "Soo" road. There will be something done when T. Lowry takes hold.—*Fargo Argus*.

For seven years North Dakota has not had a wheat crop equal in general average to the one just harvested. Late estimates place the average yield per acre of the crop of 1891 at twenty bushels.

ALL authorities on Dakota climatology agree that this is only the beginning of a series of favorable years for wheat raising. The present crop gets the farmers out of debt, as a rule, with a good balance for renewing machinery and buying stock. Another big crop will dot the prairies with new houses and barns, and make the State wonderfully prosperous.

RANSOM COUNTY'S wool clip last year was about 4,000 pounds; this year it was about 40,000 pounds. * * * A fair, conservative estimate that will stand investigation places the wheat crop of Ransom County at 1,400,000 bushels. That on a very low estimate means over \$1,000,000 for this county and all the seed we want for next year.—*Lisbon Gazette*.

THE latest estimates on the wheat crop of North Dakota place the aggregate at 50,000,000 bushels. At seventy-five cents per bushel, the lowest price it is at all likely to bring, it will be worth \$37,500,000. These figures will set Eastern farmers to thinking about the resources of this great new prairie State, and will stimulate a new immigration to its vast reserve of untilled lands.

IN the window of the *Gazette-Witness* office are two stools of oats pulled by the roadside near the fair ground. One of these stools contains fifty-six grain stalks and the other has forty-four stalks, in each case the product of a single oat. The stalks average seventy-five oats, so that in the one case a single oat produced 4,200 oats and in the other 3,300 oats. It would be hard to beat that product anywhere.—*Park River Gazette-Witness*.

WHEN the world learns that the grain yield of the six Red River Valley counties of North Dakota will average over four million dollars for each county, it is pretty

certain that a great many will come to take a view of this land. It is safe to make this statement, too—that the grain produced in North Dakota this year will be worth as many million dollars as there are counties in the State—and some of these counties have but a small population.—*Grand Forks Plaindealer*.

NOW is the time to take advantage of the low prices of good farming land in North Dakota. Prices have already advanced considerably in the Red River Valley, but further west good quarter sections, near railroads, schools and towns, can still be had for from four to six dollars per acre. In several of the counties colonies of half a dozen families of friends can find good opportunities to settle together on adjacent claims so as to form a pleasant neighborhood society.

Montana.

THE most remarkable increase in sheep we have heard of this year was that in a band of ewes belonging to Chas. Malloy, of Fergus County. This band of 1,000 ewes gave their owner an increase of 1,100 lambs, equal to 110 per cent. Who can beat it?—*River Press*

THE importance of the proposed canal to Frenchtown is attracting considerable attention, as the land to be irrigated is so situated with respect to altitude and climate as to render it useful with water for crops which can hardly be raised elsewhere in the State. This land is sufficient also in extent to more than supply the whole of Montana with everything in the way of vegetables and table truck, and its close proximity to Missoula and to railroad transportation will enable its owners and farmers to supply the entire market. The cost of this canal, which is placed at \$250,000, is of course considerable, but it will be an investment from which the returns are sure and which will increase from year to year. The enterprise will do as much as anything else in increasing the value of Missoula realty.—*Missoula Gazette*.

CIVILIZING THE CROWS.—Plenticoues, the Pryor Chief of the Crow Indians, has quite a flourishing ranch on the creek. He has taken out a ditch about two miles long and irrigates his garden patch and hay meadow. He was the first Crow Indian east of the Little Horn to embrace farming on progressive lines and did quite well last year. This year Plenticoues had about fifteen acres of good blue joint, and it is now cut and stacked separate from the slough grass and rank vegetation which most of the Indians cut and put up because it grows thicker and is easier got at. Little Fire and Coyote Runs each have ditches on their locations, and many primitive but well watered gardens are met with among the Indian ranches on Pryor Creek. Half a dozen mowing machines are owned and operated by these Indians under the supervision of Sub-agent Krieder, who also advises them as to irrigation.—*Billings Gazette*.

ENTERPRISING HELENA.—The capacity of our great smelter has been doubled. \$100,000 having been appropriated by the company this season for the extension made necessary by increasing business. The paving of Main Street in a most thorough manner has been ordered by the city council, at the unanimous request of property owners, and the work will begin as soon as the materials are received. A club house which will cost, when completed and furnished, at least \$100,000 is already under way. The Helena end of the Valley railroad has been graded and the track laid, the necessary money for the artesian well has been subscribed, the Stedman Iron Works, for which our people have subscribed \$100,000, are well advanced in construction, the new railroad to the Cœur d'Alenes has been completed, largely through the efforts of Helena capitalists, and the great trade of that region will be made tributary to Helena; and a score of other undertakings, some of them near consummation, have been promoted. Two great national conventions, that of the Ancient Order of United Workmen and the National Educational Association, have been secured for 1892.—*Helena Independent*.

Idaho.

KENDRICK to-day, presents a more active appearance on its streets than any other town of its size on the Pacific coast. City real estate is steadily going up. Substantial buildings are being erected; sidewalks laid; more business firms are being established, and our streets are being graded, and with all this nothing seems to be overcome. With the steady increase in the population of the city all this attractiveness is warranted. No failure in business of any kind takes place. Good prices in everything is maintained. This is all due to the fact of our peculiar location, which, as often stated, designs this city as a manufacturing point, and also a rich fruit and agricultural district.—*Kendrick Advocate*.

THE RUBY CREEK MINES.—These mines are attracting the attention of experienced mining men, many of whom have visited and examined them the past few months. From their favorable examinations and reports is due the boom now settling in at the mines. From the present crude development of these mines there is no doubt but that they contain rich mineral deposits. Only further

development is necessary to establish their value and producing qualities, and as they are now attracting the favorable attention of the mining community, this is only a question of a short time. Kendrick is perhaps as much interested in the success of mining operations in the Ruby Creek district as is the immediate locality. They are only about twenty eight miles distant from our thriving young city, which is their nearest and most accessible railroad point. This will be the supply point for, and the outlet of all ores they produce. Corporations have been formed and machinery going in, and mining will be indulged in to some extent during the present season.—*Kendrick Advocate*

Oregon.

A RAILROAD is to be built around the Dalles of the Columbia to connect with steamboats on the river, above and below. Portland capitalists are putting money into this enterprise.

A TRANSACTION has just been closed by a number of Mississippi Valley lumbermen whereby they come into possession of about 1,000,000 acres of land in Oregon, which was granted by the State to the Oregon Central Military Land Company for the construction of a military road. The grant is six miles wide and some 500 miles in length. It includes timber, farming and grazing land. The consideration is not made public, but it is known to be a very large sum.

Washington.

FIFTY additional coke ovens are under construction at Wilkeson. The coke industry will make Wilkeson an important town.

IRRIGATION is doing wonders in Yakima County. One resident of the valley says that the value of his fruit land has been immensely increased by the application of water. It was formerly dry and almost worthless, but now yields \$400 per acre annually.

THE marsh land in Skagit and Snohomish counties is rapidly being brought under dike and civilization. With a thorough system of under drainage remarkable results are secured. On 10,320 acres in Skagit County 15,530 tons of oats were produced last year; on 2,330 acres 6,940 tons of hay were cut.

TACOMA celebrated with a banquet, last month, the opening of her first cable road. This line climbs a hill too steep for the electric cars. With the numerous electric lines now in operation, the new cable and several steam motor lines running out to the suburbs, Tacoma is now admirably equipped with local transit facilities.

THE new flour mill at Kettle Falls is completed and the machinery nearly all in. It will be in operation in little more than a week. The power house of the electric light works is also finished, and other new enterprises are being pushed rapidly. Kettle Falls is truly a wonder. The latest proposition is for the construction of a railroad from a connection with the Spokane & Northern, through Kettle Falls to Grand Rapids, where connection will be had with a line of steamboats for the Big Bend.—*Spokane Review*.

JOHN F. BOYER, William Courtney and others have filed articles of incorporation for irrigation purposes in Walla Walla County. They propose to use the water of the Walla Walla River, which is to be taken out somewhere near the Whitman Mission, and passing down through Frenchtown will be taken high as possible up Dry Creek Valley and across to the Touchet as high as possible to cover the bottoms on both sides of it. It is intended to cover as much of the lands as possible on both sides of the Snake River divide, as also the lands on both sides of the Walla Walla River at and near Wailula.

JULY 28th steam was turned on and the big "Anaconda" began the work of excavating the river and filling in the flat at South Bend, which it will take two years steady running, day and night, to complete. About 2,000,000 cubic yards of earth will be removed from the river bottom and placed on the low ground, some of it being conveyed a distance of three-fifths of a mile. The undertaking is such as no city has ever before attempted unaided by national or state legislation. The money is all subscribed by lot holders in the portion of South Bend which is to be filled up to the newly established grade.

OBSERVING persons who have carefully watched the changes in this country for the past two years are of the opinion that dairying and the raising of heavy beef cattle will become a leading, if not the chief, industry of Yakima. The Nacheen and Wenac valleys are being largely sown to alfalfa and timothy, and the returns are very gratifying. As an illustration of the value of alfalfa we will cite the experience of Mr. Hugh Sinclair, of the Nacheen, who at his first cutting, from eleven acres, took off thirty-three tons of alfalfa, and he has kept eight calves and four head of horses continuously on one acre of this succulent feed. In this connection it is also worthy of note that Col. Howlett, on Wednesday, cut

his third, and a very heavy crop, of alfalfa from his field, and claims that he will harvest another crop in August, a fifth in September and a sixth in October. There is a fortune in this.—*Yakima Herald*.

WHATCOM WATER WORKS.—In the fourth city in Washington, which is called New Whatcom, is to be found a system of water works which, while now very incomplete, is the best in the State, and can be made the best in the United States. No other city of any pretensions in the country has such an enormous reservoir of pure glacier water overhanging it. The erratic Citizen Train figures that Lake Whatcom contains seven cubic miles of ice water fed from the glaciers of Mount Baker. The value of the system is in the fact that the supply is but $\frac{3}{4}$ miles away and 318 feet above the city.—*Whatcom Reveille*.

The Canadian Northwest.

How far north wheat may yet be successfully cultivated on this continent, is a matter for the future to determine. Archdeacon Mackay, of Saskatchewan Territory, writes: "Prince Albert is sometimes spoken of as the northern limit of the wheat producing country in the Saskatchewan district. It may be interesting to learn that this is an erroneous idea. I myself have raised good, unfrosted wheat for seven years in succession at Stanley Mission, on the Churchill River, about 200 miles north of Prince Albert." This much in regard to the eastern portion of the territories. In the western portion of the territories Edmonton has likewise been sometimes spoken of as the northern limit of successful wheat production. This idea is also very erroneous, and undoubtedly the northern limit will ultimately be placed hundreds of miles beyond Edmonton. Edmonton and Prince Albert, owing to geographical position, have been the farthest northern agricultural settlements, and some have confounded this with the idea that these settlements bordered on the northern limit of successful wheat cultivation. This by no means follows. These settlements were established, as stated, owing to geographical conditions. Settlement will extend northward as facilities are provided for reaching more northern points.—*Winnipeg Commercial*.

Alaska.

HON. CHAS. FRANCIS ADAMS, of Boston, ex-president of the Union Pacific Railroad, has written a letter to E. H. Wells, the Alaskan explorer, concerning the latter's published scheme for building a railway to Alaska. Mr. Adams says: "When I was last in the Dominion, and also in Alaska, it seemed to me not impossible that the time might come when a railroad would be needed and would be remunerative from Winnipeg, northwardly into the mining country of Alaska; but I was equally persuaded with the fact that this time had not come; neither do I believe it will come within the next ten or fifteen years." This significant letter will attract attention from railway managers all over the country. It is construed as a conservative admission from Mr. Adams that the Alaska railway may actually be built within the next twenty years, thus forming a link of the chain that is to connect the czar's Siberia railway with America.

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The Last Napoleon.

It was on September 2d, 1870, that the prestige, the active prestige, of the Napoleonic dynasty departed forever, when Napoleon III., Emperor of France, surrendered to the Prussians. Since that time the Napoleonic line has led rather a precarious existence, with neither throne or title, for republican France will have none of them, preferring "Liberty, Fraternity, Equality" to "Vive le Roi" every time. Such is the fate of anything which stands in the way of progress and millennial development. On the other hand nothing can harm that which works hand in hand with the times. For this reason the prestige of the railway will never be dimmed, for it is a substantial aid to progress. It is nearing perfection, but the end is not yet, for the possibilities are wonderful to contemplate. For an example of a thoroughly modernized railway we have only to refer you to the St. Paul & Duluth, better known as the Duluth Short Line, which is by all odds the best and most convenient route to take when traveling from St. Paul and Minneapolis to Duluth and West Superior and other prominent points, with fast trains, close connections and excellent service. Information obtainable from all ticket agents or cheerfully furnished by Geo. W. Bull, General Passenger Agent, or Geo. C. Gilfillan, Asst. G. P. A., St. Paul, Minn.



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MINNESOTA'S SUPERB CLIMATE.

One Minnesota feature we have not touched upon, but really more valuable than all, is its climate. There is no question that it is among the healthiest in this country. Its summers have more sunshine, clear sky, and cool, pure breezes, without dampness and fogs, than any other part of our country. There is no debilitating effects in its heat, and its atmosphere is free from those disagreeable nervous effects which higher altitudes engender. A man or woman feels strong and vigorous all through the summer in Minnesota, when people in less favored localities are depressed or weary and always tired. Its winters are far less rigorous than many suppose. A low temperature, it is well known by those who are acquainted with meteorology, either practical or scientific, does not always denote the coldest weather as it affects man and beast. Given a dry atmosphere and twenty degrees below zero, is no more trying upon the body than zero, with damp atmosphere. The fact is, while the summers are delightful, the fall and winter, on the average, are more enjoyable still. We do not say that there are not some disagreeable days, but we do allege that there is a less number of them than in any other section of the North American Continent.—*Moorhead News*.

RATHER A TURKISH STORY.

Many quaint and curious stories have recently been published in various sections of Oregon, and the Baker City *Blade*, which desires to keep up with the procession, tells of a lady of Haines, Baker County, who threw out some brandied cherries which had spoiled. Soon after her little boy came running in and told her their turkeys were all dead. She went out, and finding the birds lying stiff and still, plucked them to save the feathers and threw the bodies into a corner of the yard to be buried. In an hour or two the lady was horrified to look out and see the nude turkeys walking about, seeming very much embarrassed. They, however, are not the first unlucky birds to be plucked after getting drunk.

NORTHERN PACIFIC EARNINGS.

TREASURER'S OFFICE, 17 BROAD STREET,
NEW YORK, August 13, 1891.

The approximate gross earnings of the Northern Pacific Railroad Company, including Wisconsin Central Line, for month of July, were as follows:

	1890.	1891.	Increase.	Decrease
Miles: Main Line and Branches..	4,886	5,202	216	
Month of July	\$2,490,046	\$2,392,031		\$107,015
GEO. S. BAXTER, Treasurer.				

CAUTION!



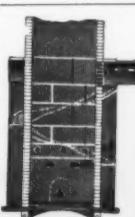
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(Hot Air Furnace Cupola.)
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South Bend, Washington.

Pacific Ocean Terminus of the Northern Pacific Railroad.

SOUTH BEND, the seaport of WILLAPA HARBOR, is the terminus of the Yakima and Pacific Coast Division of the Northern Pacific Railroad now under construction to be completed from Chehalis to SOUTH BEND this year.

The Geographical position, tributary resources and natural advantages of SOUTH BEND, and its direct rail communication with the timber, coal and wheat of Washington insure its becoming one of the leading seaports of the Pacific Coast.

Government Charts show 29 feet of water over the bar of WILLAPA HARBOR at high tide, while the towing distance to the wharves at SOUTH BEND is only 16 miles against 140 on Puget Sound and 116 on the Columbia River from Portland, Oregon.

The extraordinary growth and development of the Puget Sound cities will be duplicated at SOUTH BEND, and parties seeking new locations for manufacturing or business enterprises or a field for investment will do well to investigate further and communicate with

**THOMAS COOPER, General Manager,
Northern Land and Development Company,
SOUTH BEND, WASHINGTON.**

DENVER ADDITION TO SOUTH BEND.

There are many prosperous and growing towns in Washington, but none whose future is more bright than the city of South Bend on Willapa Harbor, 16 miles from the Pacific Ocean and the ocean terminus of the Yakima & Pacific Coast Railroad, which will be the main line of the Northern Pacific Railroad between Eastern and Western Washington.

South Bend has grown from a straggling village of nine months ago to a city of 3,000 inhabitants, much as Tacoma grew on the completion of the Northern Pacific Railroad across the mountains, making it a railway terminus. New life and new activity is being infused into the city, and on the completion of the railroad this fall, there is every prospect that the population will almost double again. Like many other cities, South Bend is peculiarly situated, so that a certain large sized tract of land commands the location of the wharves, warehouses and other large business interests by its geographical position. Such a tract at South Bend composed a fine ranch two years ago, but the early promise of a great railroad made it too valuable for farm purposes, and it has been platted as the DENVER ADDITION.

As in all large Western cities, additions once on the edge of the town have been destined to become a portion of the business portion itself, so is the Denver Addition bound by that very force of circumstances to become almost the business center of South Bend. Within a year it is certain that this will become true, as by the railroad terminal improvements now being made the Denver Addition is to become the seat of the heavy traffic consequent upon the removal of the freight depots, warehouses and other facilities to the railroad property just north and adjoining the addition.

This insures for the Denver Addition the bulk of the retail business and the erection thereon, along the railroad, of warehouses, with side track facilities, and later the wholesale houses for the same reason.

The addition is level, sloping gently back and contains the best of both business and residence property in South Bend to-day.

The west line of the addition is within three blocks of the new \$50,000 Willapa Hotel, now building. Broadway is planked through the addition and other streets are soon to be improved in the same manner. Streets are 66 feet wide and avenues 80 feet.

It will thus be seen that the Denver Addition offers the best inducements of any property now available for bargains, either to turn quickly or to hold as an investment.

For full information regarding this property, apply to

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The City of MONARCH, MONTANA,

is situated 150 miles east of Helena and 55 miles south of Great Falls, terminus of the Monarch & Great Falls R. R.,

running regular passenger and freight trains from Great Falls to Monarch. The city of Monarch is the center of the largest mining district in North America. Within a radius of fifteen miles there are 5,000 mining claims, and it is at Monarch where all the ore from these mines is hauled and loaded on the cars. The total value of these mines are many millions of dollars.

Large Reduction Works will be erected at Monarch late in the Fall, and it is destined to be the greatest distributing and reduction point in Montana.

Lots in the city of Monarch have just been placed on the market and early investors will reap the reward of the largest profits, as the future of Monarch is assured and property will enhance in value quicker and greater than in any other city West.

For maps, plats and full particulars address

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THE GIRL OF THE PERIOD AND HER BROTHER.

"Now's your chance! Crowd up on 'em, Jimmy, an' tell 'em y' won't take less 'n a dollar not to tell ma."

A CAUTIOUS OLD GENTLEMAN.

It is told that one day during the war a squad of Confederates, wearing captured blue overcoats, rode up to a house in Tennessee and greeted the owner with:

"Well, old man, what are you reb, or Yank?"
"Puzzled by the blue coats and gray trousers, and not knowing to which army his visitors belonged, Old Caution answered:

"Well, gentlemen, I'm nothin', and very little of that."
—*New Orleans New Delta.*

FAITH.

Mellick—"Those poor people were sadly reduced. Their only cow was mortgaged, and they had not a scrap of fodder for her. The family was also without food. They placed their empty dishes on the table and gathered round it and prayed for aid from on high."

Jellrok—"Ah! There was sublime faith. Of course, while they were praying a philanthropist drove up and brought them a huge basket of food?"

Mellick—"Nope! The sheriff drove up and took the cow for the mortgage."—*West Shore.*

IN THE GLOAMING.

"Waiter!"
"Yaas, sah."
"Have you some nice cakes and maple syrup?"
"Yaas, sah; but, boss, I'd vise you not to eat 'em now."
"Why not?"
"Bettah wait, sah, till it's a leetle darker. Ie gloamin' is de bes' time fo' to eat dem wheat cakes an' maple syrup, sah."

"Why?"
"Waal, you see, sah, de red ants done got into dat maple syrup an' it's a good deal pleasinger to eat it just after dusk, sah."—*Detroit Free Press.*

ONE ON THE LAWYER.

An old man was on a witness stand and was being cross-examined by the lawyer.

"You say you are a doctor, sir?"
"Yes, sir; yes, sir."
"What kind of a doctor?"
"I make intiments, sir. I make intiments, sir."
"What's your ointment good for?"
"It's good to rub on the head to strengthen the mind."
"What effect would it have if you were to rub some of it on my head?"
"None at all, sir; none at all. We must have something to start with."—*Gainesville Eagle.*

CONSUMPTION KILLED THE PIECE.

"I understand your company busted up," he said to the theatrical manager just in from the road.

"Yes, it's dead," was the reply.
"What was the matter?"
"Consumption."
"Consumption!"
"Yes; plain, everyday consumption. It killed the piece."
"How in thunder could consumption kill it?"
"Got a girl out West to play the living statue and she never said a word about it."
"About what?"
"Consumption. The first thing I knew, right in the

middle of the most important tableau in the piece, this statue had a fit of coughing that liked to have ripped the top of its head off. It died right there. A consumptive statue was more than even a jay audience could stand."

A NICE MANAGER.

"Why, Jeremiah Brown!" exclaimed Mrs. Brown, as her husband returned from a short railroad journey, "is this you alive and in the flesh?"

"Why, 'o course it's me," replied Mr. Brown, testily; "ain't this the time when I said I'd be back?"

"And you ain't been in no accident and got killed?"

"Do I look as if I was dead?"

"And you ain't lost both legs or both arms?"

"No, I ain't."

"Nor even one leg or one arm, or an eye?"

"No; I tell ye; I'm all right."

"And you didn't so much as get hurt enough so you can sit in the house and not work for a month or two?"

"How many times have I got to tell you there ain't nothin' happened?"

"Well, you do beat all! There you went and paid a dollar for a accident insurance ticket just before you left, and you havn't done anything to get any money out of it. A whole dollar wasted for nothing! And you might just as well have made ten thousand dollars if you'd only got killed. Nice manager you are.—*Buffalo Express.*

HER SMILE WAS RESPLENDENT.

A young lady in Market Street car caused as big sensation yesterday as if she were one of the mummies of the Mining Museum that had suddenly woke up and concluded to inspect this new progressive metropolis. She was a healthy, pretty, good-natured girl, and her charming smile irradiated the whole car and set the people in it crazy. At first sight it looked as if the young lady had swallowed an incandescent electric light, for every time she opened her ruby lips her front teeth shone like the front of a Kearny Street jewelry store. The passengers stared and murmured their surprise, and the young lady sat quietly under their gaze and enjoyed the astonishment.

"I'm blessed if she aint got false glass teeth," whispered one old lady to another on the opposite side of the car.

"Hang me if that woman hasn't diamonds set in her front teeth," growled a crusty old paterfamilias who had been glaring over his spectacles at the object of all the excitement from her first appearance in the car.

The old gentleman proved to be the most observing critic of the lot, as a *Chronicle* reporter, who was an interested observer of the scene in the car, discovered by interviewing a well-known dentist later on.

"I can tell you all about that," said the dentist, "right away, for it so happens that I know who the young lady is. She belongs to a swell family on Nob Hill, and has adopted the Eastern fad of having diamond settings in her teeth."

"She has made a good start, for she got in three to begin with, and naturally when she opens her mouth people not initiated are astonished at the effect."

"The diamonds are inserted in the gold filling. They are necessarily small, but very pure, and the dentist's bill was \$25."—*San Francisco Chronicle.*

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Our motto is to gain and retain an enviable reputation by making mining investments placed with us profitable to the investor. Every dollar we make for our clients makes two for us. Send for pamphlets explaining our plan of mining investments. You can make money on our plan with small outlay. Try it. We examine personally and thoroughly all mines or mining stocks offered before placing investments for clients. We have facilities for placing first-class mining investments. A copy of the "History of Gold and Silver Mining in Montana" mailed free to any address. *Legitimate mining is the safest of all productive industries for the investment of capital; and Montana is the richest mining country in the world.* Montana produced in 1890, gold, silver, copper and lead to the value of over \$47,000,000. The return for 1891 will not fall far short of \$60,000,000; and 1892 will probably show a total production for Montana alone, of \$75,000,000. We have a list of first-class partially developed mines in which we offer a liberal interest for developing capital. Orders by mail given careful personal attention. Correspondence solicited.

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TIMBER.

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FRUIT.

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COAL.

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R

GOLD.

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MISCELLANEOUS.—Limestone, marble, copper, nickel, mica, asbestos, potter's clay.

TRANSPORTATION.—Sedro has four great railroad systems in operation—Oregon Improvement Co., Great Northern, Northern Pacific and Canadian Pacific. Boats direct to Seattle and Sound ports, and the upper Skagit Valley, via Skagit River, the largest river emptying into Puget Sound.

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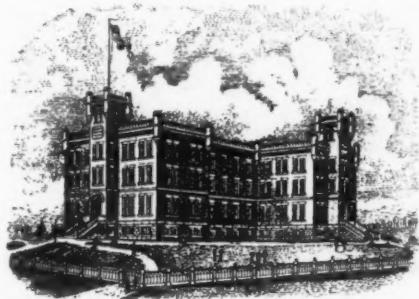
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Montanians will be interested in the handsomely illustrated article on placer mining contributed to the August Cosmopolitan Magazine by Joseph P. Reed. It is accurate and interesting.

RETURNED THE COMPLIMENT.—Of Rev. J. H. Kyle, the clergyman whom South Dakota has elected United States Senator, a member of his church in that State says: "The people of the East sent him out here to preach to the heathen at \$500 a year, and now the heathen have sent him back at \$5,000 a year."

CUSTER'S LAST SWORD.—The sword which Custer used in his campaign against the Indians, and which he lost with his life at the battle of the Little Big Horn, is now in possession of a Chicago man. Its battered blade is as flexible as whalebone, and looks as though it has been through many a hand-to-hand encounter. It is covered with innumerable designs of drums, flags, cannons and other implements of warfare.

Mrs. Florence Huntley, widow of Stanley Huntley, formerly of Bismarck, N. D., and well known throughout the Northwest, has been more than a year past in Washington City, where she has added to her reputation as a writer. Her friends will be grieved to learn that she has been compelled to abandon her profession, at least for a time, on account of an attack of congestion of the brain, brought on by overwork. She will spend part of the summer in the West and endeavor to recuperate her health.

PARTNERS IN SAINT-MAKING.—A certain preacher said that no newspaper which took the truth for its standard would make a pecuniary success. The press might return the compliment by remarking that no minister who told the truth about his congregation, alive or dead, would occupy his pulpit more than one Sunday afterwards. The press and clergy go hand in hand, whitewash brush, rosy spectacles, magnifying little virtues into big ones. The pulpit, the pen and gravestones are partners in saint-making.—Dawson (N. D.) Times.

TOOK THE POOR MAN'S OATH.—Col. H. S. Benjamin, pioneer investor and business partner of Capt. N. D. Moore, the discoverer of the Gogebic iron range, and for several years a bonanza king, took the "poor man's oath" before Court Commissioner Ryan, to escape the jail limits under execution against his body. Col. Benjamin has been under action of the execution since June 8th. When Capt. Moore had satisfied himself of the mineral wealth in the Gogebic Country, half a dozen years ago, and had secured either title or option on the best part of the range, he cast about for a promoter, who could furnish some cash to begin operations. Col. Benjamin was recommended to him, and, within two years the firm of Moore and Benjamin was rated in the millions. Finally a crisis came and Moore and Benjamin found their obligations greater than they could carry. Col. Benjamin said that he scraped together \$180 to carry Capt. Moore and his wife to other mining fields, and set about redeeming his own fortune here. His present troubles, he said, dated from a business transaction in palmy days. A verdict of nearly \$14,000 was returned against him. "It is very humiliating," said Benjamin, "but I was compelled to do as I have done, as I cannot pay the bill."—Tacoma Globe.

THE WESTERN WASHINGTON INDUSTRIAL EXPOSITION AT TACOMA,

Will open September 10th and close October 10th.

The Exposition will be held in a spacious and handsome building erected for the purpose, and will be a highly instructive and interesting exhibit of the varied resources and attractions of the great new State of Washington.

There will be SPECIAL FEATURES illustrating agriculture, stock raising, coal mining, mining for precious metals, lumbering, manufacturing, the fisheries, etc. Eastern tourists contemplating a visit to the Pacific Coast are advised to time their trips so as to see the TACOMA EXPOSITION.

Excellent music will be furnished by an orchestra from New York City. Novel entertainment features will be given from time to time. The chief object kept in view by the management will be to show under one roof and in an effective manner the diversified products which are making of Washington a wealthy and populous State.

A day each will be devoted to each of the large cities of the State with appropriate programmes, and there will be manufacturers', laborers', children's, military horticultural and floral, chamber of commerce, old settlers', Indians', miners', sailors', ladies', firemen's, babies', farmers', G. A. R., secret order', and railroadmen's days.



TACOMA,

**The Western Terminus of the
Northern Pacific and Union
Pacific Railroads.**

**The Head of Navigation and the
Wheat Shipping Point of
Puget Sound.**

**The Wholesale and Manufactur-
ing Center of the Pacific
Northwest.**

Look at the Following Evidences of its Growth:

Population in 1880, 720.

Assessed value of property in 1880	\$517,927
Assessed value of property in 1888	\$5,000,000
Assessed value of property in 1889	\$20,000,000
Assessed value of property in 1890	\$29,841,750
Real Estate Transfers for 1885	\$667,356
Real Estate Transfers for 1888	\$8,855,598
Real Estate Transfers for 1890	\$15,000,000
Banks in 1880	1
Banks Jan. 1st, 1891	14
Bank Clearances for 1880	\$25,000,000
Bank Clearances for 1890	\$47,000,000
Wholesale business for 1889	\$9,000,000
Wholesale business for 1890	over \$18,000,000
Value of manufacturing products for 1889	\$6,000,000
Money spent in Building Improvements in 1887	\$1,000,000
Money spent in Building Improvements in 1888	\$2,148,572
Money spent in Building Improvements in 1889	\$5,821,195
Money spent in Building Improvements in 1890	\$6,273,430
Money spent in Street Improvements in 1887	\$90,000
Money spent in Street Improvements in 1888	\$263,200
Money spent in Street Improvements in 1889	over \$700,000

Population, { Census 1890, } 40,165.

Money spent by N. P. R. R. Co. on Terminal Improvements in 1887	\$250,000
Money spent by N. P. R. R. Co. on Terminal Improvements in 1888	\$506,000
Money spent by N. P. R. R. Co. on Terminal Improvements in 1889	\$750,000
Coal shipped in 1882	(Tons) 56,300
Coal shipped in 1889	(Tons) 180,940
Crop of Hops in 1881	(Bales) 6,098
Crop of Hops in 1889	(Bales) 40,000
Lumber exported in 1887	(Feet) 107,326,280
Wheat shipped in 1889	(Bushels) 1,457,478
Private Schools in 1889	4
Public Schools in 1880	2
Public Schools in 1889	9
Value of Public School Property, 1889	\$264,480
Value of Private School Property, 1889	250,000
Regular Steamers in 1880	6
Regular Steamers in 1889	67
Electric line in operation	(Miles) 12
Electric line building	(Miles) 26
Cable line building	(Miles) 9
Steam motor lines in operation	(Miles) 32

TACOMA is the only natural outlet for the grain crop of the Inland Empire, as Eastern Washington and Oregon is aptly termed, and it costs from \$1,500 to \$4,000 less to ship a cargo of wheat from Tacoma than from any other port north of San Francisco.

TACOMA is now the Metropolis of Puget Sound, and is the best location for manufacturers for supplying both Inland and Water Trade. Full printed and written information will be furnished on application to

ISAAC W. ANDERSON,

General Manager of The Tacoma Land Co., TACOMA, WASH.

N. P. R. R. Headquarters Building.

The N. P. R. R. Co.'s New Car Shops at Tacoma

Will be completed and in operation within a few weeks' Time.

These shops are located in the southern part of the city; the grounds comprise an area of 65 acres; the buildings number 30 in all, and will cost when completed \$750,000. 1,000 Skilled Workmen

will be employed in these shops, and another 1,000 will soon find employment in the various manufactures that must, in the very nature of things, cluster about the shops. These men, with their families, mean a population of at least 10,000 people in the immediate vicinity of the shops within the next eighteen months. As a result of all this, property there will advance rapidly in value.

THE EXCELSIOR PARK LAND CO.

owns and controls all the desirable property platted and unplatted in the immediate vicinity of the shop grounds and is now offering for sale

CHOICE BUSINESS AND RESIDENCE LOTS

at reasonable prices and on easy terms. This property is only NINE MINUTES' ride on the N. P. R. R. from the Pacific Avenue Depot

The company offers liberal inducements for the location of MANUFACTORIES. It has already located one plant, viz: The American Foundry Co., employing eighty men. For prices of lots, maps and descriptive matter of this property, together with a bird's-eye view of Tacoma and printed matter regarding the State of Washington, address

THE EXCELSIOR PARK LAND CO., Tacoma, Wash.

CITY OF KINGSTON.

Steamers operated in close connection with the Northern Pacific R. R.

Tonnage, 1,300.

Victoria Route.

Leaves TACOMA 8:00 A. M. (except Sunday)
For SEATTLE, PORT TOWNSEND
and VICTORIA.

Speed, 18 knots.

ROUND TRIP DAILY.

Purchase Through Tickets at any Eastern Coupon Office.
PUGET SOUND AND ALASKA STEAMSHIP COMPANY.
For complete information concerning Puget Sound
and Alaska, address
G. G. CHANDLER, Gen. Pass. Agt., Tacoma.
D. B. JACKSON, Gen. Mgr., Seattle.

CITY OF SEATTLE.

Tonnage, 1,411.

Whatcom Route.

Speed, 19 knots.

ROUND TRIP DAILY.
Leaves Tacoma 6:00 P. M. daily (except Saturday.)

WINNIPEG, MANITOBA.

Largest city in British North America between Lake Huron and the Pacific Ocean. Population in 1870, 215; in 1880, 8,000; in 1890, 27,000. Assessment in 1881, \$9,199,435; in 1890, \$23,000,000. It is the great central mart of Canada. It is one of the greatest railway centers of the Dominion. The trade of Winnipeg amounts to about \$40,000,000 annually. It is the commercial, political, social, educational and literary center of the Canadian Northwest. It is one of the healthiest cities in Canada, the most enterprising, energetic and prosperous.

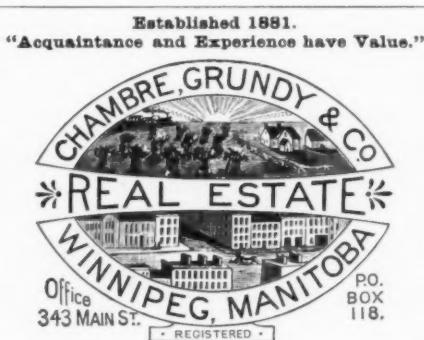
CROTTY & CROSS,

Real Estate and Loans,

Corner Main and Market Streets,

WINNIPEG.

We have been ten years in the real estate business in this city, and are well posted in localities and values. Come and see us. Lists on application.



FRED D. COOPER,

Real Estate, Insurance and Financial Agent,
BRANDON, MANITOBA.

The best Farms with land ready for crop in the Banner Districts of Brandon and the Souris Valley for sale on easy terms. Wild lands from \$8 an acre.

THE LELAND HOUSE,

PORTAGE LA PRAIRIE, MAN.

Strictly First-class W. NEVINS, Proprietor.

When visiting Portage La Prairie stop at the Leland House. All modern Improvements. Headquarters for commercial travelers. Free buss meets all trains. W.M. NEVINS, Prop.

A. W. ROSS & CO..

Real Estate and Financial Agents,

Winnipeg, Manitoba.

Country and City Property bought and sold. We have a large list of improved and unimproved Farms from \$2 to \$25 per acre.

CHAS. H. ENDERTON, Real Estate and Investment Broker.

Careful attention given to investments for non-residents.

Correspondence solicited.

No. 357 Main St., WINNIPEG.

REFERENCES: The Savings Bank of St. Paul, St. Paul, Minn.; National German-American Bank, St. Paul, Minn.; Commercial Bank of Manitoba, Winnipeg.

OCOSTA, BY THE SEA.

The Coast City.

Pacific Ocean Terminus of the Northern Pacific Railroad.

ON GRAY'S HARBOR,

CHEHALIS COUNTY,

WASHINGTON.

OCOSTA is the deep-water Ocean shipping-point of the Northern Pacific Railroad.

OCOSTA has better and more protected harbor facilities than any other city north of San Francisco.

OCOSTA is only three miles from the Pacific Ocean, therefore causing a necessary towing of only five miles, against one hundred and forty on Puget Sound, and one hundred and sixteen on Columbia River, to Portland, Oregon.

OCOSTA is the natural outlet for all the Gray's Harbor Country, which region has five times the resources, such as timber, mineral and agricultural lands tributary to it, than any other inlet on the coast of Oregon or Washington.

The Northern Pacific Railroad is practically completed to Ocosta, and will be entirely so within sixty days. What the Northern Pacific has done for Tacoma will be again witnessed at Ocosta.

The Land Company has reserved 1,500 acres for manufacturing purposes. Parties desiring new locations for manufacturing or business enterprises, and such desiring more particular information, will find it to their interest by communicating with

E. B. MORRISON, Gen'l Manager

Olympia Land and Investment Co.

Ocosta Land Co.

CLEVELAND WHEEL AND FOUNDRY WORKS,

MAHER & BRAYTON, Proprietors,

MANUFACTURERS OF

Car, Engine, Truck and Tender Wheels, Railroad, Rolling Mill and Machinery Castings, and Street Railroad Wheels and Turnouts;
Also, Chilled Faced Railroad Frogs.

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FRANK J. HECKER, President.

C. L. FRERER, Vice President and Treasurer.

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DETROIT, MICH.

Freight Cars of all Classes. Car Wheels and Castings.
Capacity, 30 Cars per day.

THE STANDARD LUBRICATING OIL OF AMERICA FOR RAILROADS.

Galena Engine, Coach and Car Oil.

GRAVITY 26°, 27°, 28°, 29°. COLD TEST 10° to 15° BELOW ZERO.

No freezing in coldest weather, and entire freedom from hot journals at any time; perfect uniformity at all seasons of the year. Saves 40 per cent. in wear of brasses, as its exclusive use upon a majority of the leading railroads has demonstrated.

SHOWING BETTER RESULTS THAN ANY OIL EXTANT.

References furnished on application.

GALENA OIL WORKS (Limited),

FRANKLIN, PA.

CHAS. MILLER, Pres't and Gen'l Manager.

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RAILROAD MANAGERS AND MASTER MECHANICS.

**SIBLEY'S
Perfection Valve Oil.**

Most perfect lubrication insured, and guarantee entire freedom from corrosion and honey-combing of Cylinders, and destruction of joints of Steam Chest by fatty acids.

In exclusive use upon eighty railroads. References furnished upon application.

Make exclusive specialty of Valve and Signal Oils for railroad use.

SIGNAL OIL WORKS,

**J. G. SIBLEY, Pres't,
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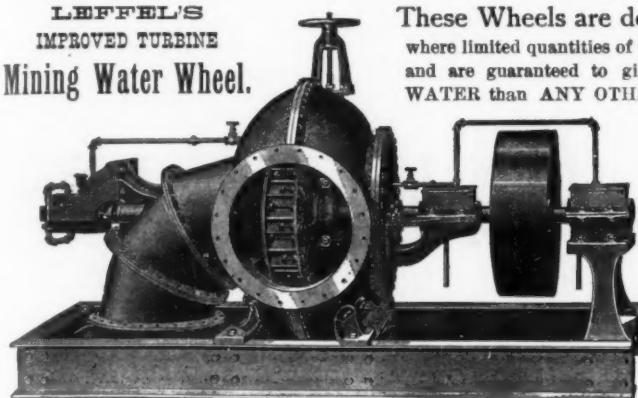
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Buckles.**



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CLEVELAND, OHIO.**



LEFFEL'S
IMPROVED TURBINE
Mining Water Wheel.



These Wheels are designed for all purposes where limited quantities of water and high heads are utilized and are guaranteed to give MORE POWER with LESS WATER than ANY OTHER WHEEL MADE.

Estimates furnished on application, for Wheels specially built and adapted to suit any particular case.

Fine Illustrated Catalogue sent free.

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Or 110 Liberty St., N. Y.

THE JANNEY COUPLER

For Freight Cars,
For Passenger Cars,
For Locomotive Tenders.

MANUFACTURED ONLY BY

THE McCONWAY & TORLEY COMPANY,
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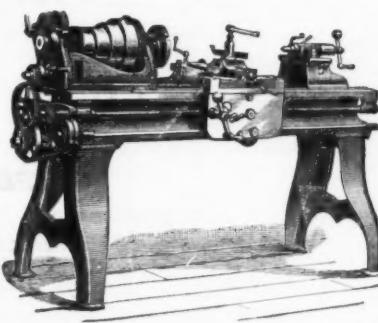
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Small Tools and Machine Shop Supplies.

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Highest Grades of PAINTS and COLORS on the Market

For Exterior and Interior Decorations.

Descriptive Circulars on application.

YOUNG MEN and OLD MEN

GET INTO THE TOILS OF THE SERPENTS OF DISEASE!

They make heroic efforts to free themselves, but not knowing how to successfully SHAKE OFF THE HORRID SNAKES

They give up in Despair and sink into an early grave.

WHAT AN ERROR! THERE IS HELP!

All you who suffer from *Lost Vigor, Weakened, Shrunken or Undeveloped Limbs or Organs, Physical Excesses*, and all their evil results, secret diseases, evil thoughts and dreams, etc., etc., should send for

OUR NEW BOOK sent free (sealed) for a limited time, which explains the philosophy of diseases and the formation of the Sexual Organs of man, and how, by

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SEND FOR THE BOOK TO-DAY, Do not hesitate. We claim a monopoly of success in treating these Disorders, and have thousands of sworn testimonials to establish our claim.

ERIE MEDICAL CO.,
64 Niagara Street, BUFFALO, N. Y.



THE WAY OF THE WEST.

People in a new and wonderful country like this of Washington often go to bed poor and get up rich. A ranch at \$1.25 an acre, for 160 acres, finds itself all at once "cut up," so to speak, by a railroad project, and, presto! \$100 to \$500 per acre is the figure with ready buyers. A portion is platted into town lots—a city laid out and acres at \$500, in town lots sell—say fourteen lots, corners for \$500, insides at \$350—four corners \$2,000; ten inside lots, \$3,000—\$5,000 per acre. And so it goes—only varying from flat failures to much higher prices and more grand results. Cities have sprung up all over this grand State, and hundreds of other cities will yet be built. From the virgin forest—the barren plain from hills and unknown places, cities will rise up as if by magic. Why? Because we have all the conditions:

Climate—equaling the sunny South—no winter! Soil—Producing most marvelous crops. Farming pays; crops never fail.

Minerals—Gold, silver, copper, lead, coal and iron abound.

Forests—The grandest of our continent, with timber for thousands of cities and ships to cover the seas.

Enterprise—The State is made up of the enterprising business men of "all creation," who were first to come to found a new State. Enterprise, energy and thrift rule and carry the day in Washington.

Railroads—Penetrating now every corner of the vast State—developing mines, agricultural and farming regions, and opening up the marts of commerce and trade.

Western Washington has the climate of Italy, the wealth, in minerals, of Pennsylvania, Nevada and California combined; in timber, of all the East; in agricultural lands, of Dakota, and a thousand times better, without her droughts, blizzards and general bankruptcy—we have neither.

No eastern man of sense or energy could ever return from Washington to the East and live there in contentment, after a casual knowledge of our conditions.

No one ever loved home and friends of his native State more than the writer; and yet, were he East without funds, he would walk back and commence at the ground, (even passed forty), and die nearer being rich, with all the needed comforts of life, rather than be content with what is considered a comfortable business in the East with \$1,000 capital for a starter!

Young man of the East—if you have "sand," not gold—but grit—come hither. If you are a drone, depending on assistance from others, stay where drones rule the roost. Drones need to bring enough with them to pay return passage. They are not at home here. Read this:

Two years ago Mr. J. S. Johnson walked all the way from Spokane into the Okanogan mining country, and he did not know whether or not he would be able to rustle a grub stake when he got there either, but having plenty of pluck he succeeded in weathering all storms and at last "struck it rich." A few days ago he arrived in Wilbur on a \$200 horse and carried a check for \$5,000 in his pocket, the result of a sale of part interest in one of his claims. He is going on a visit to his old home and expects to make a visit to Old Mexico before he returns to the land of his good fortune.—Wilbur Register.

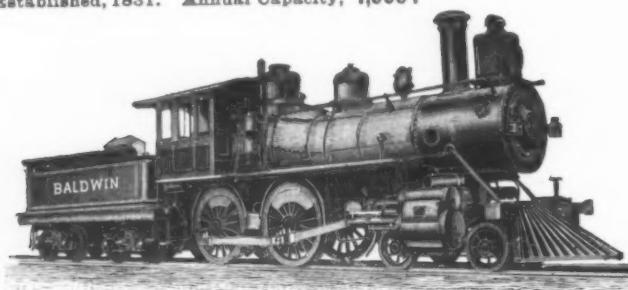
THEY COME HIGH.—The Scottish Mission, which has its headquarters at Jerusalem, reports the conversion of six Jews to Presbyterianism at a cost of \$5,000 apiece. Jerusalem Jews come rather high, but our Presbyterian friends must have them. They ought to try and convert a few Russian Christians by the way of variety.—Hebrew Standard.

THOMAS PROSSER & SON,
15 Gold Street,
NEW YORK.

KRUPP'S STEEL TIRES

On Locomotive Driving Wheels
And on Steel Tired Wheels
GIVE THE BEST RESULTS
For Every Variety of Service.

Established, 1831. Annual Capacity, 1,000.



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BURNHAM, WILLIAMS & CO., Proprietors,

MANUFACTURERS OF

LOCOMOTIVE ENGINES.

Adapted to every variety of service, and built accurately to Standard Gauges, and Templates. Like parts of different Engines of same class perfectly interchangeable.

COMPOUND LOCOMOTIVES,

Passenger and Freight Locomotives, Mine Locomotives, Narrow Gauge Locomotives, Noiseless Motors and Steam Cars for Street Railways, etc.

ALL WORK THOROUGHLY GUARANTEED.

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THE WESTINGHOUSE AIR BRAKE CO., WILMERDING, PA., U. S. A.

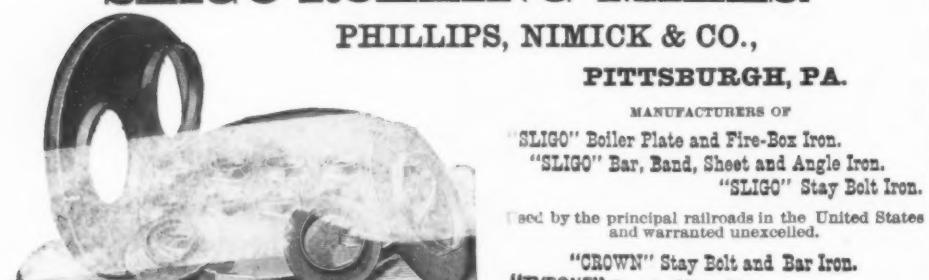
Manufacturers of the Westinghouse Automatic Break, Westinghouse Automatic Freight Brake, Westinghouse Locomotive Driver Brake. The "AUTOMATIC" has proved itself to be the most efficient train and safety brake known. Its application is INSTANTANEOUS; it can be operated from any car in train, if desired, and should the train separate, or a hose or pipe fail, it applies automatically. A GUARANTEE is given customers against LOSS from PATENT SUITS on the apparatus sold them. FULL INFORMATION FURNISHED ON APPLICATION.

The Automatic Freight Brake is essentially the same apparatus as the Automatic Brake for passenger cars, except that the various parts are so combined as to form practically one piece of mechanism, and is sold at a very low price. The saving in accidents, flat wheels, brakemen's wages, and the increased speed possible with perfect safety, will repay the cost of its application within a very short time.

The Westinghouse Automatic Brake is now in use on 22,000 engines and 250,000 cars. This includes 161,000 freight cars, which is about 15 per cent. of the entire freight car equipment of the country. Orders have been received for 100,000 of the improved Quick Action Brakes since December, 1887.

SLIGO ROLLING MILLS.

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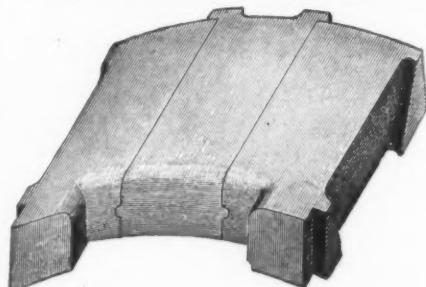
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FIRE BRICK, Locomotive Fire Box Tiles.
Specialties in Fire Clay Goods.



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NEW YORK LOCOMOTIVE WORKS, ROME, N. Y.

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Want MONEY? or a HOME?
Want WORK? or a FARM?

Want to open a store in a growing town?

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Want to know how to buy improved farms in a well settled region without paying cash?

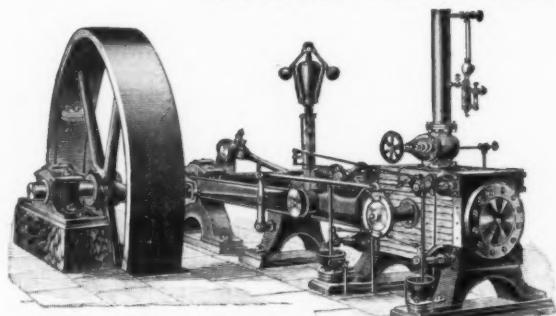
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"Economy is wealth"—but there is no economy in a "cheap" engine.



BUILDERS OF
High Grade Automatic
ENGINES

From 30 to 500 Horse-power
of both the Corliss and Giddings Automatic types.

BOILERS

and complete Steam plants furnished and erected.

Send for circulars and estimates. Largest works west of the Mississippi River at

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C. S. LEWIS, Agt., 703 Market St., ST. LOUIS, MO.

See next or last issue for cut of other styles, or write for catalogue.

CHAS. A. OTIS, THOS. JOPLING, J. K. BOLE, Managing Directors.

The OTIS STEEL CO., Limited.

Manufacturers of

**CAST STEEL, Boiler, Fire Box, and Tank Plates,
Steel Driving, Truck, Tender, Car Axles and Forgings.**
CLEVELAND, OHIO.



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MAKER AND PATENTEE OF

Improved Hydraulic Jacks,

PUNCHES, BOILER-TUBE EXPANDERS,

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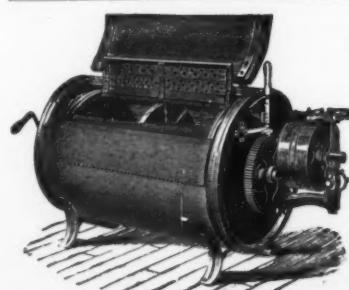
Communications by letter will receive prompt attention.

Jacks for Pressing on Car Wheels or Crank Pins Made to order.

Crescent Brands Tool Steel are Warranted Equal in Quality



and in Uniformity of Temper to any Standard Brands of Foreign Production.



Empire Laundry Machinery Co.

189 Washington St., CHICAGO, ILL.

LAUNDRIES, HOTELS AND INSTITUTIONS
Supplied with Complete Steam Outfits.

References: Palmer House, Chicago; Land & River Improvement Co., West Superior; Northern Pacific R. R. Co., St. Paul.
Send for Illustrated Catalogue.

SPARE MOMENTS.

CLOVES.—The chief supply of cloves is obtained from the islands of Zanzibar and Pemba where the clove tree was introduced in 1830. Trees ten years old should produce twenty pounds of cloves. Trees of twenty years frequently produce upwards of 100 pounds each. The yield this season will be in excess of any previous year.

**

IVORY FROM SKIM MILK.—A Norwegian invention for the production from skim milk of a new material which has been called *lactite*, or milk-ivory, has just taken practical shape, and a factory for its production is about to start operations in Iceland. This new material bears a close resemblance to real ivory, and, in addition, can be made in black or any color desired.

**

THE SPOON FAD.—Fads fly fast. The souvenir spoon craze has reached Alaska, and away up at Fort Wrangle and Sitka the Alaskan Indians are manufacturing "souvenir" spoons. They are of solid silver, have the beak of the raven, the eye of the whale, the tail of the serpent, and all the other totems, and retail for \$3 apiece, with the customary discount for wholesale orders.

**

A PAPER BUILDING.—The experiment of constructing a building chiefly of paper has been successfully made at Hamburg, where an immense hotel, with its facade and other important parts composed of that material has been erected. It is claimed that the building is absolutely fire-proof and also impervious to the action of the elements, which render brick, stone and wood unsightly and unsafe under prolonged exposure.

**

RARE METALS.—Some rare metals possessing special qualities are required for certain work. Thus palladium is used in making some parts of time pieces, and iridium for the points of gold pens. Lithium is the lightest of metals. Rhodium is extremely hard and brittle and is only fusible at a very high temperature, and iridium is the heaviest substance hitherto discovered. The uninitiated have no idea of the value of these scarce products, which are, most of them, far more precious than gold or silver.

**

MEERSCHAUM IN WASHINGTON.—The latest discovery in Washington is a bed of superior meerschaum. It will now be in order for a Washingtonian to fill an Orcas Island pipe with Yakima tobacco and light it with a Spokane match. Breweries we have already. With a distillery or two it would be easy for Washington people to enjoy all the luxuries of life even if the trans-continental trains should quit running and the rest of the world should declare a boycott against the United States.—*Spokane Review*.

**

THE ELECTRIC CAR CURE.—Electricity and magnetism are simply omnipotent in the opinion of the general public, remarks the *Electrical Review*. The story comes from Maine of a paralytic of ten years' standing, who took a few rides on an electrically propelled car and was thoroughly cured. This calls to mind the experiment made some years ago to test the virtue of magnets in the cure of disease. A quack was reaping a golden harvest by furnishing horseshoe magnets to his patients effecting marvelous cures. Upon investigation it was found that wooden horseshoes painted in imitation of magnets had precisely the same effect in the other cases, thus scoring a success for faith cure and a defeat for magnetism. Bread pills and a dilute solution of *aqua pura* have been known to possess great virtue.

A LITTLE NONSENSE.

Effie—"See, Eva, there's a ring exactly like the one that Jack Chapman gave you—the one that he said he paid \$200 for." Eva—"In there? Where?" Effie—"Right in front here, and it's marked \$7.68."

Customer (to tailor)—"Mercy! your charges are terrible! Can't you put the price of this suit down a little?" Tailor (grimly)—"No; but I shall expect you to put the price down before you take the suit away."

Howard—"I didn't get home till late last night."

Richard—"What sort of a hand did you hold?"

Howard—"Just the neatest little hand you ever saw. It belonged to old man Goldlock's only daughter."

Papa—"How are you progressing in your language lessons, Ethel?"

Ethel—"Oh, I have learned to say 'thank you,' and 'if you please,' in French."

Tommy—"That's more than you ever learned in English."



DISAPPOINTED IN SOME OLD FRIENDS.

"W-a-t-e-r, wazzer! Yassir, wazzer! I'll be dog-goned 'f the stree' lam's haven't taken t' lecturin' too!"

"My boy," said a witty young swell to a street arab, "have you seen a cart pass this way with a load of monkeys?"

Street arab equal to the occasion—"Why? Hae ye fa'en aff?"

The Preacher—"Well, Sam, how have you been getting along since your conversion?"

Sam—"Oh, fust rate, sah—fust rate. Me and de whole family has quit lyin', swearin' and stealin'—in a great measure."

Mrs. Seeker—"I have two daughters in society in winter, and I'm on the go all the time. Your daughter isn't going out much, I believe?"

Mrs. Found—"Oh, no. You see, she got engaged last October, and she don't have to."

Mr. Summerheim—"So your old friend Abrahams has failed?"

Mr. Sonneburn—"Ya, three hundred thousand liapilities."

Mr. Summerheim—"And how much assets?"

Sonneburn—"Nuttings at all."

Mr. Summerheim—"Weeping Rachel! What a genius."

"No, Shaky," said Mrs. Eisenstein to her youngest hopeful, "I cannot let you go to dot theatre dis afternoon; it was too expensive, but I vill let you shay at home and watch your farder making out his bills."

Bronson—"Nearly all novels have a widely improbable conclusion."

Brown—"In what way?"

Bronson—"Why, they generally end with 'So they were married, and lived happily ever after.'"

Little Jack—"Mamma, can I go to the surprise party at Billy Bunt's to-night?"

Mamma—"Who are going?"

"Oh, all the boys, 'bout a hundred."

"Mercy! Perhaps you won't be welcome."

"Oh, yes, indeed. Billy invited us himself."

"He did? Then who is to be surprised?"

"I dunno. His mother, I fancy."

He—"Yes, darling, and it shall be the purpose of my life to surround you with every comfort and to anticipate and gratify your every wish."

She—"How good of you, Harry! And all on twelve dollars a week, too!"

"What did the ass say to Balaam, Willie?"

"Come off."

"Why do you think that?"

"Because he knew Balaam was onto him."

"That was very sad about Pimpleigh. He ed of nicotine poisoning the other day."

"Yee, so I heard. The doctors held an autopsy on the remains. They found his stomach and intestines lined with cigarette pictures."

Niece (whispering)—"Now, Uncle Hiram, let me give you a hint. Here in town we never eat pie with a knife."

Uncle Hiram (from Hawcreek)—"Gosh! Neither do I, Mandy. Any way suits me." (Takes his piece of pie up in his fingers.)

"So you havn't made Smudger your partner after all, eh?"

"No, and I'll tell you why. Smudger was engaged to my wife before I married her, and I don't believe in becoming too friendly with a man who has proved himself to be more wide awake than I am."

Old Mr. Dadkins—"A-a-r-r! So I have caught you kissin' my daughter, have I?"

Young Mr. Cooley—"I trust there is no doubt about it, sir. The light is quite dim, and I should feel vastly humiliated if it should turn out that I had been kissing the cook."

Mr. Hunnimune—"Now, as we are going to start housekeeping, Ethel, we should begin right. Order, you know, is Heaven's first law, and there must be a head to every house, so—" Mrs. Hunnimune—"That's all provided for, George. Mother's coming to live with us."

WOMAN'S POWER.

She may be so frail and delicate that, leaning on your arm, You would break your neck in sympathy to keep her out of harm;

Yet she'll wield her little slipper, though it numbers only two,

On a rebel urchin's trousers till she beats him black and blue.

She can do more with a hairpin than a man with all his tools;

She can make the smartest statesmen act like animated fools

She can argue without reason, on some notion in her head,

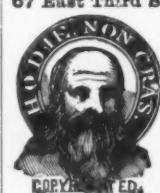
Till a man with sound intelligence will wish that he was dead.

"Is there an opening for a man like me here?" asked Cheeke of the merchant. "Yes, you'll find it back there," returned the merchant. "It is marked, 'This way to the street.' Good morning."

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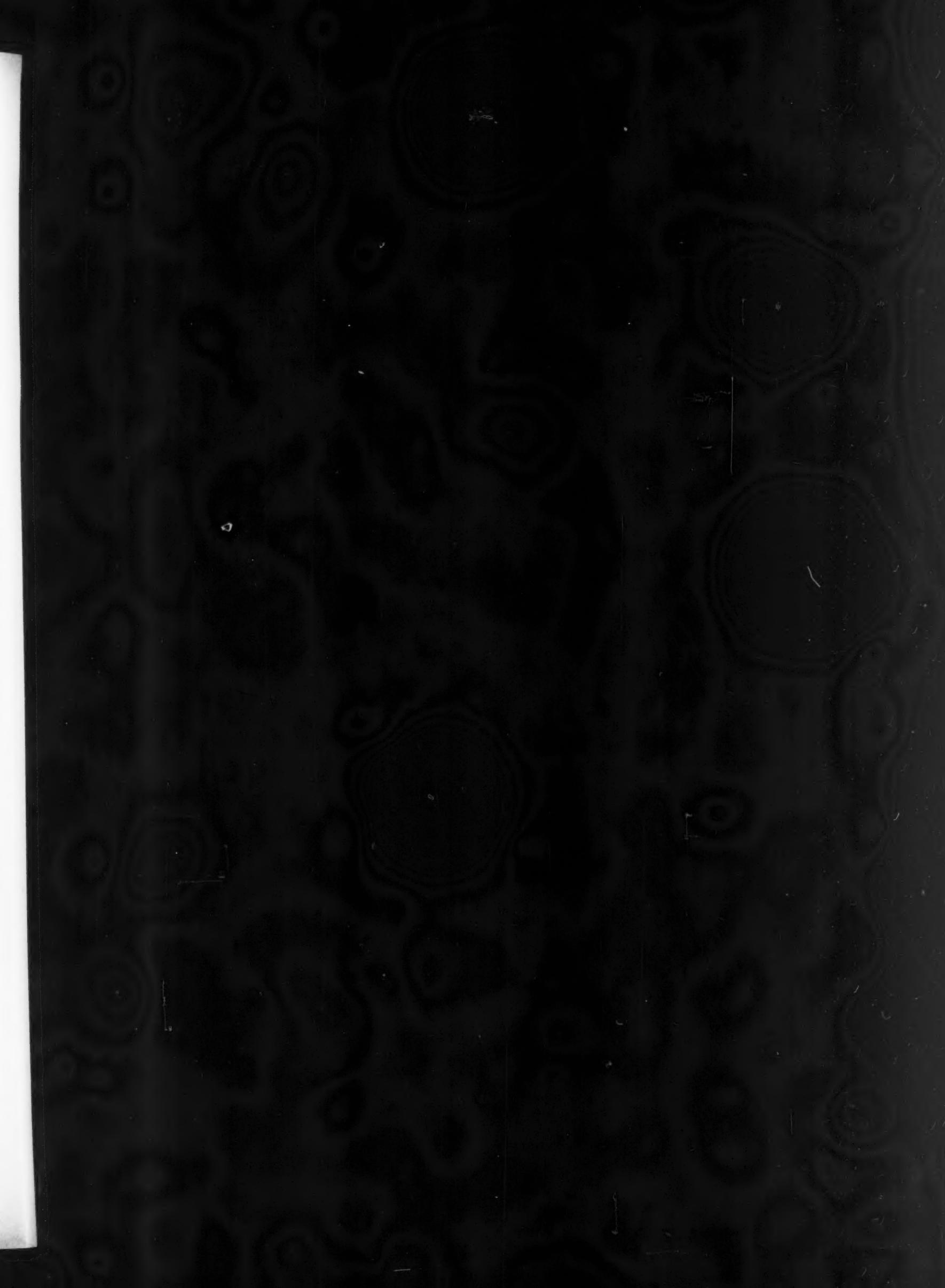
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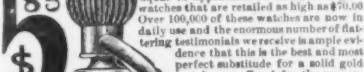


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